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Revision of the genus *Euscelidia* Westwood, 1850 (Diptera: Asilidae: Leptogastrinae)

by

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ABSTRACT

The genus *Euscelidia* Westwood, 1850 is revised. Sixty-eight species (55 Afrotropical, 11 Oriental, 4 Palaearctic) are recognised, of which 40 are newly described: Afrotropical - *acuminata*, *adusta*, *atrata*, *bechuana*, *cacula*, *cana*, *capensis*, *crena*, *erichthenii*, *fistula*, *hesperia*, *hyalina*, *insolita*, *kasungu*, *lata*, *longibifida*, *lucioides*, *milva*, *mucronata*, *natalensis*, *notialis*, *obtusa*, *obudu*, *peteraxi*, *picta*, *pipinna*, *pulchra*, *senegalensis*, *tsavo*, *vallis*, *venusta*; Oriental - *abbreviata*, *cobice*, *flava*, *glabra*, *lepida*, *livida*, *popa*, *prolata*, *splendida*. *Dolichoscius* Janssens, 1953 is synonymised with *Euscelidia*. Four species, *Dolichoscius francoisi* Janssens, 1953, *Leptogaster brunneus* Loew, 1858, *L. nenemusha* Speiser, 1910, *L. ochricornis* Loew, 1858, are newly combined with *Euscelidia*. Four species are newly synonymised, *Dolichoscius longipes* Janssens, 1954 with *D. francoisi*, *Euscelidia oldroydi* Lindner, 1955 and *Leptogaster stigmaticalis* Loew, 1852 with *Leptogaster proculus* Walker, 1849, and *Lasiocnemus pilipes* Curran, 1927 with *Leptogaster datis* Walker, 1849. *Euscelidia piliensis* Oldroyd, 1972 is transferred to *Leptogaster* Meigen, 1803. The status of *Leptogaster setifer* Frey, 1937 and *L. simplex* Bigot, 1878 is revised as species of *Leptogaster*. Redescriptions and descriptions of the genus and all species and an identification key to species are provided. The distribution, seasonality, and biology are discussed. Comments on the subfamily Leptogastrinae are given.

Keywords: *Euscelidia*, Leptogastrinae, Asilidae, Diptera, revision, biogeography

INTRODUCTION

Robber flies are an attractive taxon among the Diptera. Large, robust species, e.g. those of the genera *Lamyra* (Loew, 1851), *Proagonistes* Loew, 1858, or *Microstylum* Macquart, 1838, are easily collected even by the non-specialist. Smaller species are generally found only by experienced entomologists or by specific standardised collecting techniques, e.g. sweeping through grass. This is true for most of the rather small, elongate, and slender representatives grouped in the subfamily Leptogastrinae. Seventeen leptogastrine genera are presently valid worldwide and *Euscelidia* Westwood, 1850 with 68 species is one of the largest and most speciose of genera. The objective of this research project is to enhance our understanding of the poorly known leptogastrine fauna by providing a taxonomic revision of *Euscelidia* and comments on the subfamily Leptogastrinae.

This revision of *Euscelidia* entails the presentation of diagnoses of all species, summarises what is known about their biology and biogeography, and presents keys and illustrations for their identification. *Euscelidia* is centred on the African continent (including Madagascar; Fig. 1) where major speciation events have taken place—55 of 68 known species occur here. The remaining species are distributed in the Oriental (11 species, India to the Philippines) and Palaearctic regions (4 species; Egypt, Greece to Turkmenistan, and China; *bishariensis* Efflatoun, 1937 and *nitida* (Wiedemann, 1828) are probably distributed in both the Afrotropical and Palaearctic regions).

This project is the first revision of *Euscelidia*. Westwood (1850) erected the genus on the basis of the strongly swollen metathoracic femora of the type species. This feature is not an autapomorphy, but is found in many other species of Leptogastrinae and is not useful in delimiting *Euscelidia*. The only autapomorphic feature for the genus appears to be the postpronotal peg (ppro peg; Fig. 4; see also illustrations by Engel & Cuthbertson (1934: 36, Fig. 1) and Oldroyd (1974: 20, Fig. 8)). The ppro peg is not a complex structure that presents entirely satisfying support for the monophyly of *Euscelidia* (see section on the subfamily Leptogastrinae for further comments about relationships of genera). This structure is situated on the pronotum anterior to the mesonotal apodeme. The size and shape vary within *Euscelidia*, but when it is present it is easily seen. Hermann (1926) was first to recognise this feature as diagnostic. Martin (1968) stated that the ppro peg is an apodeme. This explanation seems to be adequate, however, a detailed study was not carried out.

Altogether some 1485 specimens have been examined during this study. It seems probable that utilisation of so many specimens would increase the number of species and reveal new synonymies. This is indeed the case as the following statements demonstrate. A number of species here shown to belong to *Euscelidia* were described in the speciose, worldwide genus *Leptogaster* Meigen, 1803. Early authors, such as Loew, were not aware of the presence of a diagnostic feature (postpronotal peg) for *Euscelidia*. They followed Westwood's concept of the genus and described new species that did not have particularly swollen metathoracic femora in *Leptogaster*. A number of these species are to be newly combined in this revision. Other species were described more than once due largely to a failure to compare type material prior to description. This is evident for example in *E. procula* (Walker, 1849). Three names have been applied to specimens collected in three different geographic areas in Africa—*procula* for western Africa, *oldroydi* Lindner, 1955 for eastern Africa, and *stigmaticalis* (Loew, 1852) for

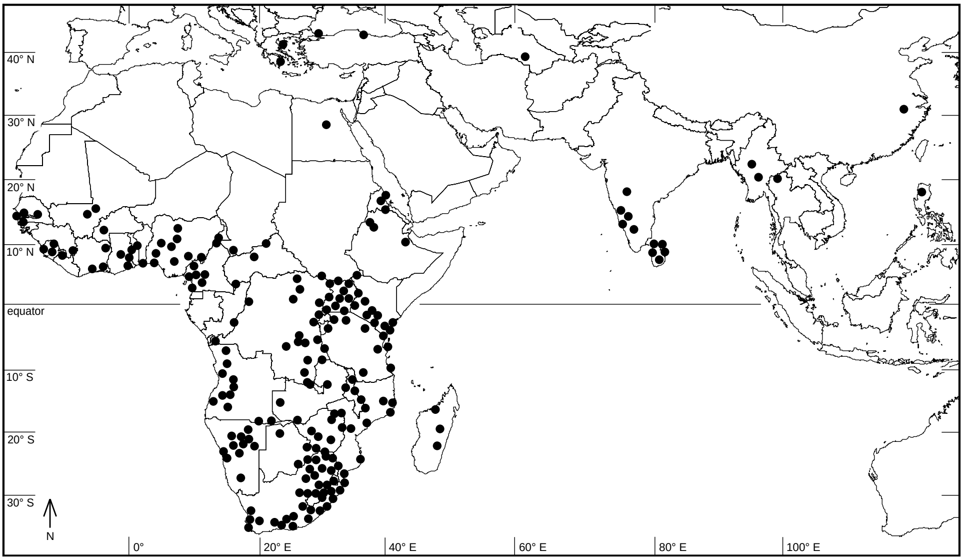

Fig. 1. Distribution of *Euscelidia*.

southern Africa. Comparison of all type specimens has demonstrated that *oldroydi* and *stigmaticalis* are junior synonyms of *procula*. This species is very widely distributed in the afrotropics (Fig. 56), ranging from The Gambia in the northwest to Kenya in the northeast and South Africa in the south. Another problem is evident in a group of species comprising *artaphernes* (Speiser, 1910), *datis* (Walker, 1849) (new junior synonym *pilipes* (Curran, 1927)), *rapax*, and two new species, referred to as the *datis* species-group. The five species can only be distinguished by features of the male terminalia. Oldroyd (1939: 28) mentioned that *artaphernes*, *datis*, and *rapax* look very similar, but he was not in a position to describe the differences. The same author listed *pilipes* as a junior synonym of *rapax* in the Afrotropical Catalogue (Oldroyd 1980). Again, a comparison of all type specimens revealed that all these species are valid except for *pilipes*, which is shown to be a junior synonym of *datis*. The lectotype of *Leptogaster datis* has apparently got a damaged abdomen and so the male terminalia remained undescribed until a single male specimen from Sierra Leone, in which the type locality is situated, was examined at the end of this project. This specimen, together with another from Senegal, led me to accept *pilipes* as a new synonym of *datis*, the oldest name in this group. The type species of *Euscelidia*, *E. rapax*, is known only from the single male type specimen whose provenance is unknown (Westwood (1850) mentioned 'Africa tropicali?' in his publication). Two species are distinct from all others so far known in this species-group and will be newly described here.

Taxonomic history of *Euscelidia*

Wiedemann 1818 - Described *Leptogaster pallasii* from 'campis australibus rarior' (probably referring to southern Russia (Dr A. Pont pers. com.)).

Wiedemann 1828 - Described *Leptogaster nitidus* from 'Nubien' (Egypt–Sudan).

Walker 1849 - Described *Leptogaster proculus* and *L. datis* both from Sierra Leone, and *L. marion* from 'North Bengal', India.

Westwood 1850 - Described *Euscelidia* with the type species *rapax* from 'Africa tropicali?' providing illustrations of a whole specimen as well as an antenna, head, and claw.

Loew 1852 - Described *Leptogaster stigmaticalis* from Inhambane, Mozambique.

Loew 1858 - Described *Leptogaster brunneus, ochricornis,* and *validus* from 'Caffraria', South Africa. Presented short redescriptions of *Leptogaster nitidus* and *stigmaticalis*.

Loew 1860 - Provided comprehensive redescriptions of *Leptogaster brunneus, nitidus, ochricornis, stigmaticalis*, and *validus*.

Schiner 1867 - Described *Euscelidia fascipennis* from Brazil.

Loew 1871 - Described *Leptogaster pubiceps* from 'Epirus' (Greece) and discussed its similarity to *pallasii*.

Bigot 1878 - Described *Leptogaster simplex* from Sri Lanka.

Speiser 1910 - Described *Leptogaster artaphernes* from Kibongoto, Kilimandjaro area and *L. nenemusha* from Meru, Tanzania. Listed *L. stigmaticalis* occurring in the area.

Speiser 1913 - Described *Euscelidia discors* from Douala, Cameroon.

Hermann 1926 - Gave a diagnosis of the genus with a list of common species (*datis, discors, pubiceps, rapax, stigmaticalis, valida*). Two additional species (*affinis* from east Africa and *ochracera* from India) are mentioned, but have never been formally described. He also described *Systellogaster* with the type species *Euscelidia fascipennis*.

Curran 1927 - Described *Lasiocnemus pilipes* from Kwamouth, Democratic Republic of Congo (DR Congo).

Engel 1929 - Recorded *Euscelidia nitida* and *stigmaticalis* from southern Africa.

Engel & Cuthbertson 1934 - Reported *Euscelidia rapax* from the Harare District, Zimbabwe and mentioned that it is common and a weak flyer. An illustration of the 'peculiar pillar-like process' (postpronotal peg) was given.

Efflatoun 1937 - Described *Euscelidia bishariensis* from Gebel Elba, Sudan with illustrations of an antenna, proboscis, head and pronotum, wing, and male terminalia. A coloured drawing of a whole specimen was also provided.

Frey 1937 - Described *Leptogaster setifer* as *'Leptogaster s. str.'* from Dapa, Siargao Island, Philippines.

Cuthbertson 1939 - Mentioned *Euscelidia rapax* from Mashonaland, Zimbabwe and recorded a leafhopper as prey of a female specimen.

Oldroyd 1939 - Described *Euscelidia lucida* from Namwamba Valley, Uganda, giving illustrations of the head and scutum of *lucida* and an undescribed species and the male terminalia of *lucida*. He mentioned that *E. arthaphernes* is similar to *datis* and *rapax*.

Janssens 1953 - Described *Euscelidia trifoliata* and *E. proculus* var. melanostoma from Rumonge, Burundi, with illustrations of the male terminalia. Listed *E. datis*, *procula*, *proculus* var. melanostoma, and *rapax* as occurring in the area. Additionally, he described *Dolichoscius francoisi* from Muhinga, Burundi, with a photograph of a whole specimen as well as an illustration of the male terminalia. Apparently, the formal description for this genus was published a year later.

Janssens 1954*a* - Gave a list of species from the Parc National de l'Upemba, DR Congo, with descriptions of *Euscelidia bicolor*, *castanea*, and *festiva*. The wings of all new species and the male terminalia of *bicolor* and *festiva* were illustrated. Described *Dolichoscius* with the type species *longipes* from the Parc National de l'Upemba with illustrations of a wing and a metathoracic leg (see Janssens 1953; see Hull (1962) for type species of genus).

Janssens 1954*b* - Described *Euscelidia schoutedeni* from Moto, DR Congo, and listed *datis* and *festiva* from Lubumbashi, DR Congo.

Janssens 1955 - Reported *Euscelidia procula* from Ruanda-Urundi in present day Burundi.

Lindner 1955 - Described *Euscelidia oldroydi* from Msingi, Tanzania. *E. artaphernes* and *rapax* were listed as occurring in the area as well.

Janssens 1957 - Described *Euscelidia anthrax* from Tsessebe, Botswana, *bequaerti* from Lubumbashi (former Elizabethville), DR Congo, and *zumpti* from Sabie, South Africa. The descriptions were supplemented with illustrations of the antenna, wing, and male terminalia (the latter only for *anthrax* and *zumpti*).

Oldroyd 1960 - Reported *Euscelidia festiva* from Handeni, Tanzania.

Hull 1962 - Provided diagnoses of *Dolichoscius* and *Euscelidia*. Illustrations of an antenna, head, wing, metathoracic leg, and female terminalia of an unidentified *Dolichoscius* were provided. *Euscelidia rapax* was illustrated with drawings of an antenna, head, wing, and female terminalia. He listed the following species:

Dolichoscius - Afrotropical: *francoisi* (type species). *Euscelidia* - Afrotropical: *discors, lucida, rapax*; Palaearctic: *bishariensis, conopsoides* (Pallas in Wiedemann, 1818) with the junior synonyms *pallasii* and *pubiceps*.

In *Leptogaster* the following species were listed: Afrotropical: *brunneus, datis, nenemusha, ochricornis, proculus, stigmaticalis, validus*; Palaearctic: *nitidus*; Oriental: *marion, setifer, simplex*.

In *Lasiocnemus* one Afrotropical species was listed: *pilipes*.

Martin 1964 - Described *Euscelidia fastigium* from Ambato-Boeni, Madagascar.

Martin 1965 - Transferred *Leptogaster marion* to *Euscelidia*.

Janssens 1968*a, b* - Listed *Euscelidia pallasii* from Anatolia, Turkey.

Martin 1968 - Discussed character states for his family Leptogastridae and mentioned several morphological features for different species of *Euscelidia*.

Oldroyd 1970 - Described *Euscelidia dorata* and *moyoensis* from Garamba National Park, DR Congo, and illustrated the male terminalia. A list of species was given and the problem of distinguishing *Euscelidia* and *Leptogaster* was discussed. A key to the African genera of Leptogastrinae including *Euscelidia* was presented.

Oldroyd 1972 - Described *Euscelidia piliensis* and *rapacoides* from Luzon Island, Philippines.

Oldroyd 1974 - Gave a list of species occurring in southern Africa: *anthrax, nitida*?, *stigmaticalis, valida, zumpti*. Discussed the problem of distinguishing *Euscelidia* and *Leptogaster*.

Oldroyd 1975 - Listed 5 Oriental species: *marion, piliensis, rapacoides, setifer, simplex*.

Theodor 1976 - Provided descriptions and illustrations of the male terminalia of *Euscelidia bishariensis* and *datis* as well as male and female genitalia of a South African species (note that illustrations 16–17 of *datis* were labelled *artaphernes*; the unidentified species from South Africa will be described here as a new species).

Oldroyd 1980 - Listed 2 Afrotropical species for *Dolichoscius*: *francoisi, longipes*. Listed 22 Afrotropical species for *Euscelidia*: *anthrax, artaphernes, bequaerti, bicolor, bishariensis, castanea, datis, discors, dorata, fastigium, festiva, lucida, moyoensis, nitida, oldroydi, procula, rapax* (with junior synonym *pilipes*), *schoutedeni, stigmaticalis, trifoliata, valida, zumpti*. Three species (*brunneus, nenemusha, ochricornis*) were listed under *Leptogaster*.

Joseph & Parui 1983 - Listed 5 Oriental species: *marion, piliensis, rapacoides, setifer, simplex*.

Lehr 1988 - Listed 3 Palaearctic species: *bishariensis, pallasii* with junior synonym *pubiceps* (*conopsoides* is listed as a collection name), *nitida*.

Joseph & Parui 1990 - Listed *Euscelidia marion* and *simplex* from India.

Shi 1995 - Described *Euscelidia gutianensis* from Mt. Gutian, China.

Joseph & Parui 1998 - Provided a key and short diagnoses of the two species, *marion* and *simplex,* found in India.

Nagatomi *et al.* 2002 - In reviewing the literature on Leptogastrinae provided information for *Euscelidia* and *Dolichoscius*.

This overview of the taxonomic history of *Euscelidia* would indicate that an interest in this genus has been maintained. The diagram in Fig. 2 helps visualising the actual work that has been done on *Euscelidia*. Plotted are the cumulative

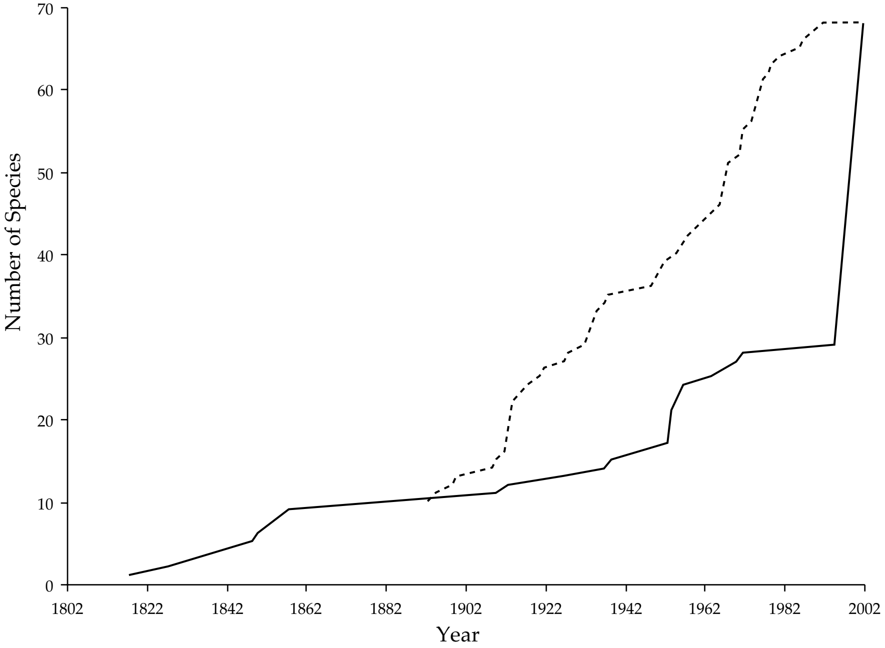

Fig. 2. Graph illustrating cumulative description of species (solid line) and cumulative collection of first collected specimen for each species (dashed line; from 1893 onward).

description curve and the cumulative collection curve of the first collected specimen for each species. The latter curve is only plotted from 1893 onward because most specimens collected prior to 1900 lack collecting dates. The collection curve indicates that new species of *Euscelidia* accumulated rather quickly from 1893 onward with no evidence of a marked slow-down in recent years. Only during the 1950s Janssens, in a series of papers (1953 1954*a*,*b* 1957), dealt more exhaustively with the leptogastrine Asilidae and described a number of new species and 'kept up' with the accumulation of species. On the other hand, his work dealt mostly with a regional fauna (Belgian Congo present day DR Congo) and he did not use potentially available material from other institutions. The same is true for Oldroyd (1939 1970 1972) because he used small regional collections that were made available to him. During the 1960s, 70s, and 80s, a number of expeditions, e.g. BMNH (southern Africa), MZLU (western Africa, Sri Lanka), and ZMUC (Greece, India), accumulated material that has not been studied up until now. Later, through the extensive collecting effort of Dr J. Londt (Natal Museum, South Africa) in southern Africa, many new specimens were added to the NMSA collection. Additionally to these institutional collections, I was able to examine the small but important Afrotropical collection of Dr W. Barkemeyer (Flensburg, Germany) in which a number of new species were awaiting description (specimens now deposited in the NMSA). Together with many other museum collections, some 1485 specimens were studied. That is why it is not surprising that the present revision more than doubles the number of species in *Euscelidia*.

The subfamily Leptogastrinae

Martin (1968) concluded in an analysis of all genera of Leptogastrinae that they should be grouped as a distinct family—the Leptogastridae or grass flies—closely related to the Asilidae. This point of view, however, was not accepted by the dipterist community (Oldroyd 1969) although Papavero (1973) did not include the taxon in his attempt in classifying the subfamilies of Asilidae. Today, there is no doubt that the Leptogastrinae is a taxon (referred to as a subfamily) within the large and diverse monophyletic Asilidae (Artigas & Papavero 1988; Wood 1981; Woodley 1989). Woodley (1989) recognised three autapomorphies for the Asilidae: (1) imagines with labellae of labium strongly reduced, fused with prementum; (2) hypopharynx of imagines strongly sclerotised, modified into a hypodermic, needle-like structure; (3) face of imagines with vestiture of strong macrosetae called mystax. Every single one of these features applies to the Leptogastrinae as well. Moreover, the Asilidae is the only taxon within the Asiloidea in which the imagines are predatory. The specific development of this habit together with adaptations in morphology (e.g. proboscis), physiology (e.g. poisonous saliva), and behaviour might support the monophyly of Asilidae including Leptogastrinae, too. Species of Leptogastrinae are somewhat small, elongate, and slender and not always recognised as robber flies on first sight. This is simply an adaptation to their different life history and habitat (grasslands and nearby vegetation) and not a reason for considering this taxon a distinct family.

A number of synapomorphies, mainly formulated by Martin (1968), are known for Leptogastrinae and are listed here: (1) mesoanterior angles of postpronotum extended onto pronotum forming two distinct lobes (Martin 1968); (2) mesonotal apodeme situated between these pronotal lobes (Martin 1968); (3) metathoracic coxae positioned anteriorly (a probable adaptation for clinging to grass stems); (4) reduction of pulvilli; (5) reduction of alula; (6) 2nd abdominal sternite divided into two sclerites, which are divided by a membranous 'fenestra' (Martin 1968); (7) male epandrium divided into a proximal part and a movable distad surstylus (Martin 1968); (8) absence of larval mandibles (Martin 1968).

Artigas & Papavero (1988: 96) listed as synapomorphies: slender shape; preference to capture resting prey; peculiar egg-laying habit; helicopter-like flight; preference to inhabit grassy habitats. These features are mainly based on ecological observations or are general statements about the appearance of representatives of Leptogastrinae. They alone cannot be considered as strong, supportive synapomorphies until the morphological grounding for each of the features is presented.

The concept of leptogastrine genera is not always well understood. A number of the presently 18 recognised genera (Geller-Grimm in press) contain only few species (1–15 species) and are delimited by peculiar diagnostic features. *Dolichoscius* Janssens, 1953, for instance, is defined by the densely arranged setae on the metathoracic tibiae and tarsi, an apomorphic feature only present in a single species *francoisi* Janssens, 1953 (second species, *longipes* Janssens, 1954, new junior synonym). This genus is here shown to be a junior synonym of *Euscelidia*. *Lobus* Martin, 1972 is based on features of the male terminalia only (Martin mentions a single female for the nine recognised species), but not a single comparative study of the male terminalia of Leptogastrinae exists. The speciose, worldwide genus *Leptogaster* with some 262 species is most probably paraphyletic and is one reason why a delimitation of other genera of

Leptogastrinae is difficult. Species that do not have one of the peculiar diagnostic features found in other genera were described as species of *Leptogaster* and eventually increased the number of species in this genus. A number of features that were attempted to use to define *Euscelidia*, additionally to the ppro peg, were found to be present in single species of *Leptogaster*. A detailed study on *Leptogaster* is needed to examine the generic validity and generic concepts within the Leptogastrinae.

MATERIALS AND METHODS

Morphological terminology follows mainly that recommended in the *Manual of Nearctic Diptera* (McAlpine 1981) although terminology relating to the antennae follows Stuckenberg (1999) and Dikow & Londt (2000). Table 1 lists all abbreviations for morphological terms (following McAlpine 1981) used in the text. Other terms used herein refer to *The Torre-Bueno Glossary of Entomology* (Nichols 1989). The term pruinosity (verb 'pruinose') is here used for the very short, fine cuticular microtrichia that densely cover certain body parts of flies. Two species-groups are established to accommodate species that share apomorphic features of the male terminalia and are phylogenetically closely related. The author's use does not intend any subgeneric or even generic ranking of these two groups. The species descriptions are generally

TABLE 1.

List of abbreviations for morphological terms.

aed	aedeagus	lat pr gonst	lateral process/es of gonostyli
aed apod	aedeagal apodeme	meso	mesothoracic
anepm	anepimeron	meta	metathoracic
anepst	anepisternum	npl s	notopleural seta/e
apsel	apical 'seta-like' sensory element	occ	occiput
C	costa	oc tr	ocellar tubercle
cell a_1, a_2	anal cells	pal s	postalar seta/e
cell bm	basal medial cell	ped	pedicel
cell br	basal radial cell	plp	palpus/palpi
cell c	costal cell	pped	postpedicel
cell d	discal cell	ppro peg	postpronotal peg
cell r_1–r_5	radial cells	pr epand	proximal part of epandrium
cell sc	subcostal cell	presut	presutural
cerc	cerci	pro	prothoracic
clw	claw	prob	proboscis
d aed shea	dorsal aedeagal sheath	psut	postsutural
dc s	dorsocentral seta/e	ptero	pterostigma
ds sctl s	discal scutellar seta/e	r-m	crossvein radial-medial
emp	empodium	R_1, R_{2+3}	branches of radius
fc	face	S	abdominal sternite/s
fc gib	facial swelling/gibbosity	Sc	subcosta
fem	femur/femora	scp	scape
gonp	gonopore; opening of ductus ejaculatorius	sct	scutum
		sctl	scutellum
gonst	gonostyli	sctl s	scutellar seta/e
hlt	halter/es	spal s	supra-alar seta/e
hypd	hypandrium	sur	surstylus
kepm	katepimeron	T	abdominal tergite/s
kepst	katepisternum	tar	tarsomere/s
lat apod	lateral apodeme	tib	tibia/e
lat pr aed	lateral processes of dorsal aedeagal sheath	trn sut	transverse suture
		v aed shea	ventral aedeagal sheath

composite and not based solely on holotypes. The type material for new species does not always include all examined specimens, but was selected to incorporate intraspecific variation and to represent species with well-preserved specimens. In all instances specimens were dry-mounted on pins. The female and male terminalia were first excised and macerated for some hours in cold 10% potassium hydroxide. They were temporarily stored in 70% ethanol for examination and illustration and eventually sealed in micro vials containing 100% glycerine and attached to the specimen's pin. Morphological features were illustrated using a 10x10 ocular grid on an Olympus SZ60 stereo microscope. The vestiture on female and male terminalia is not shown. In recording label data for type specimens a standard format is used, where information on each label is demarcated by a slash (/). Square brackets ([]) are used to explain label data (e.g. abbreviations). If the label data are not printed in black ink on a white rectangular label, information relating to these is added in parentheses. When recording data for other specimens, information is also given (where available) in a standard manner (locality, co-ordinates or grid reference, date of collection (month indicated in roman numerals)). Square brackets are used to indicate useful additional information not found on labels. Female (♀) and male (♂) symbols indicate the gender while a question mark (?) refers to specimens of undeterminable gender (i.e. with broken or missing abdomen). The 'material examined' list is organised alphabetically with respect to country and within each country ordered on co-ordinates from north to south (within South Africa provinces are arranged alphabetically). Localities for which no co-ordinates could be found are arranged at the end of each country's listing. The depositories are given at the end of each material list. The distribution is illustrated in distribution maps with all localities plotted, for which co-ordinates could be traced. If no exact co-ordinates could be found for the only representative within a particular country, a symbol in the centre of that country is plotted. The type locality, if exact co-ordinates could be traced, is plotted with an open symbol for species that have been found in more than one locality. All material examined with a JEOL JSM-840 scanning electron microscope was first critically point dried. Photographs of the wings were taken using an Olympus SZH10 stereo microscope (transmitted-light in dark-ground microscopy mode).

The majority of specimens studied are housed in the Natal Museum, Pietermaritzburg (NMSA) and The Natural History Museum, London (BMNH). Institutions providing additional specimens are listed below, together with the abbreviations used in the text when citing depositories and the people who kindly assisted: AMNH - American Museum of Natural History, New York City, USA (D. Grimaldi, T. Nguyen); BMNH - The Natural History Museum, London, United Kingdom (J. Chainey); BPBM - Bernice P. Bishop Museum, Honolulu, Hawaii, USA (N. Evenhuis, K. Arakaki); Coll. Dikow - Private collection of Torsten Dikow, Rostock, Germany; Coll. Geller-Grimm - Private collection of Fritz Geller-Grimm, Frankfurt a. M., Germany; CUIC - Cornell University Insect Collection, Ithaca, NY, USA (J. Liebherr); ISNB - Institut royal des Sciences naturelles de Belgique, Brussels, Belgium (P. Grootaert, P. Limbourg); IZAS - Institute of Zoology, Academia Sinica, Beijing, China; MRAC - Musee royal de l'Afrique Centrale, Tervuren, Belgium (E. De Coninck, J. Debecker); MZHF - Zoological Museum, University of Helsinki, Finland (G. Ståhls-Mäkelä); MZLU - Zoological Museum, University of Lund, Sweden (R. Danielsson); NHMB - Naturhistorisches Museum, Basel, Switzerland (D. Burckhardt); NHMW - Naturhistorisches Museum, Vienna, Austria (R. Contreras-

Lichtenberg); NHRS - Naturhistoriska Riksmuseet, Stockholm, Sweden (T. Pape); NMSA - Natal Museum, Pietermaritzburg, South Africa (D. Barraclough, J. Londt); OXUM - Hope Entomological Collections, University of Oxford, United Kingdom (A. Pont); SMFD - Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt a. M., Germany (W. Tobias); SMNS - Staatliches Museum für Naturkunde, Stuttgart, Germany (H.-P. Tschorsnig); USNM - National Museum of Natural History, Smithsonian Institution, Washington, DC, USA (C. Thompson); ZMHB - Museum für Naturkunde, Humboldt Universität, Berlin, Germany (H. Wendt, J. Pohl); ZMUC - Zoological Museum, University of Copenhagen, Denmark (R. Meier); ZSMC - Zoologische Staatssammlung, Munich, Germany (W. Schacht).

TAXONOMY

Genus *Euscelidia* Westwood, 1850

Euscelidia Westwood, 1850: 232. Type species: *Euscelidia rapax* Westwood, 1850, by monotypy.
Dolichoscius Janssens, 1953: 2. **syn. n.** Type species: *Dolichoscius francoisi* Janssens, 1953, by monotypy.

Generic diagnosis: *Euscelidia* is distinguished from other genera of Leptogastrinae by the presence of the postpronotal peg (ppro peg; Fig. 4). Additional features are the dense pile of anteriorly directing setae on the anepisternum, the consistently open wing cells, gonocoxites and epandrium fused to hypandrium, and enlarged hypandrium.

Generic redescription: *Head:* Fc pruinose, fc gib generally indistinct (Fig. 3), sometimes distinct (lower facial margin protruding); mystax consisting of few macrosetae (4–12) arranged in 1 row or many macrosetae (usually more than 20) arranged in a number of rows dorsally on lower facial margin; oc tr apruinose or pruinose dorsally; *Antennae* Figs 9A, B - scp short; ped longer than scp; pped cylindrical, generally longer than scp and ped combined, sometimes as short as scp and ped combined; style with two elements (narrow, cylindrical, long proximal segment and apsel), apsel hyaline or brown.

Thorax: Ppro peg small to large, pruinose; sct entirely covered with pruinosity, median stripes and/or lateral spots apruinose, or predominantly apruinose (pruinosity restricted

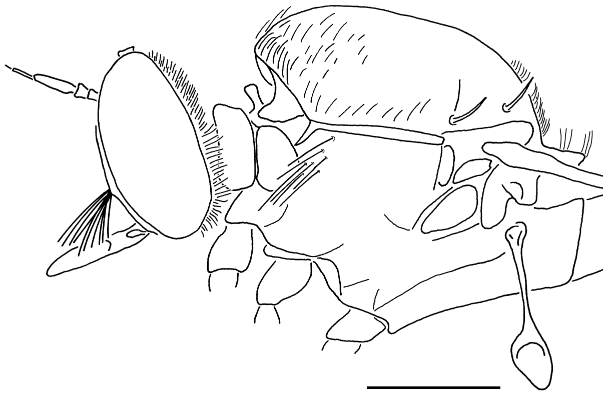

Fig. 3. *Euscelidia senegalensis* sp. n. Lateral aspect of head and thorax (not all setae illustrated). Scale line = 1 mm.

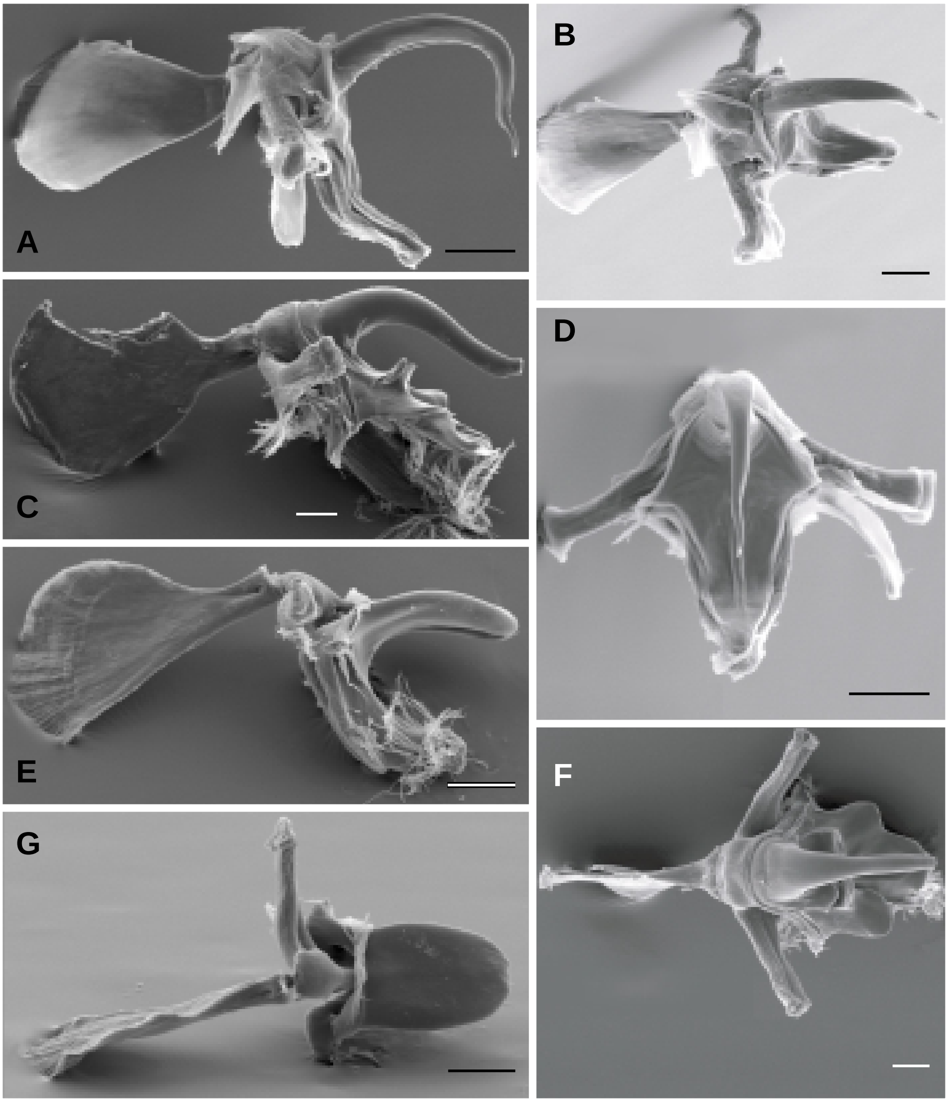

Fig. 4. Aedeagi. A, B, D. *Euscelidia pallasii*. A. Lateral. B. Dorsal. D. Anterior. C, F. *E. pulchra* sp. n. C. Lateral. F. Dorsal. E, G. *E. splendida* sp. n. E. Lateral. G. Dorsal. Scale lines = 100 µm.

to anterior, lateral, and posterior margins), often setae scattered on surface; macrosetae: 1 npl s, 1 spal s, and sometimes 1 pal s; anepst and anepm covered with dense pruinosity, long, only seldom short, setae directing anteriorly on anepst and kepst, posterior half of kepst and entire kepm more sparsely pruinose; posterior sct with short, erect setae; sctl with short or long ds sctl s and sctl s; *Legs* - fem pale yellow proximally, with small, circular, dark brown spot apically, meta fem distally clubbed; tib often with anterior pale yellow stripe not reaching tip; first tar yellow proximally, brown distad, remaining tar brown, black setae; clw black, long, pointed; emp minute (indistinct) (Fig. 9E), very short but distinct (Fig. 9F), or long (from a fifth to nearly the length of a clw) (Fig. 9C),

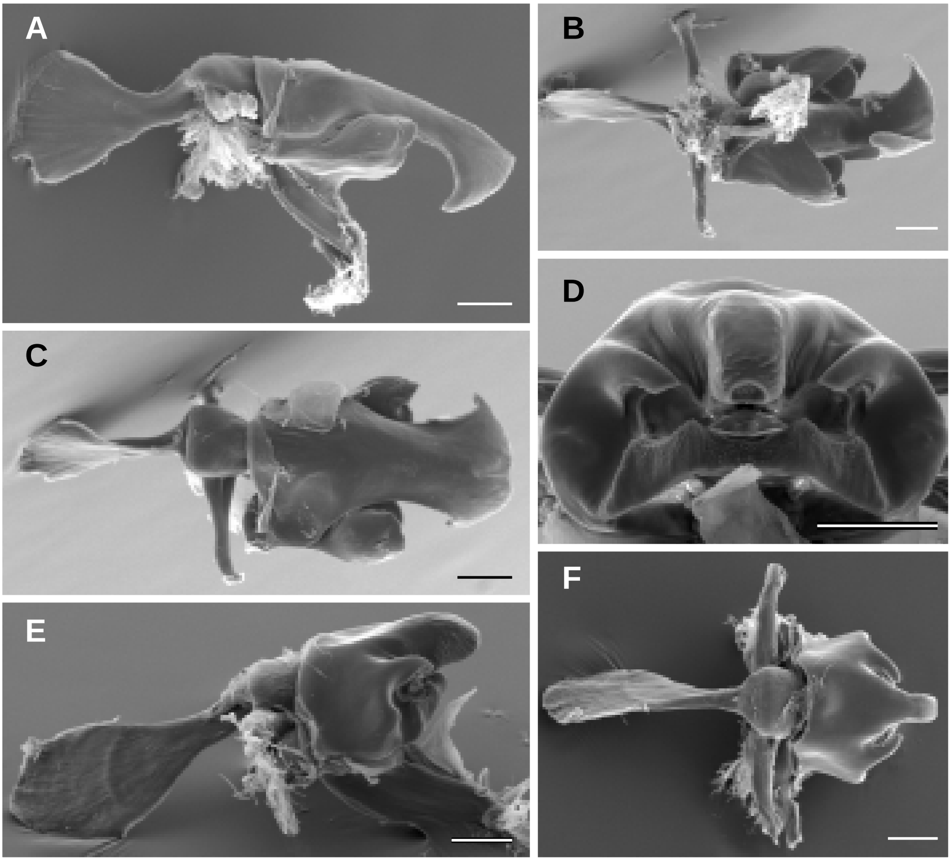

Fig. 5. Aedeagi. A, B, C. *Euscelidia natalensis* sp. n. A. Lateral. B. Ventral. C. Dorsal. D, E, F. *E. bequaerti*. D. Anterior. E. Lateral. F. Dorsal. Scale lines = 100 µm.

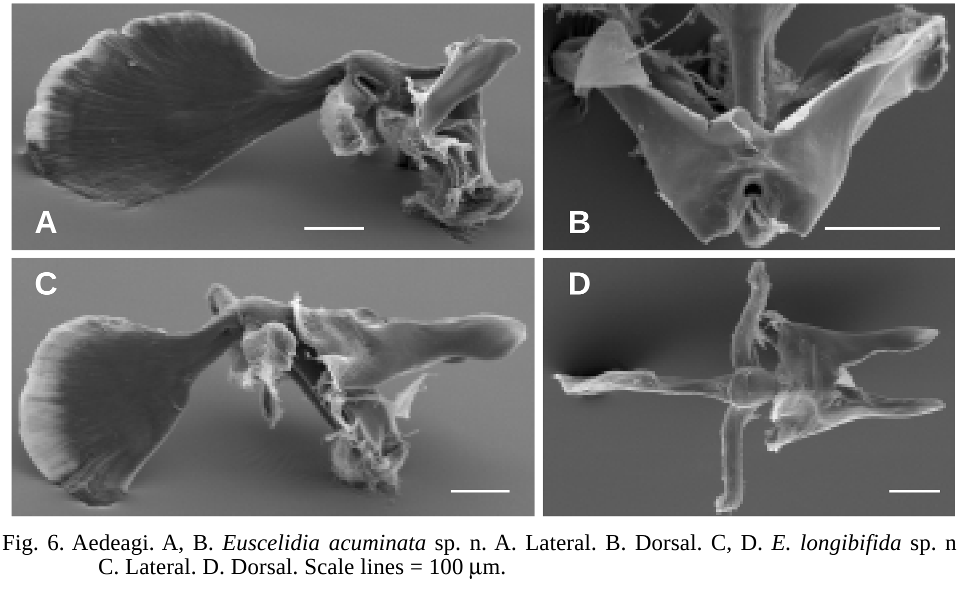

Fig. 6. Aedeagi. A, B. *Euscelidia acuminata* sp. n. A. Lateral. B. Dorsal. C, D. *E. longibifida* sp. n. C. Lateral. D. Dorsal. Scale lines = 100 µm.

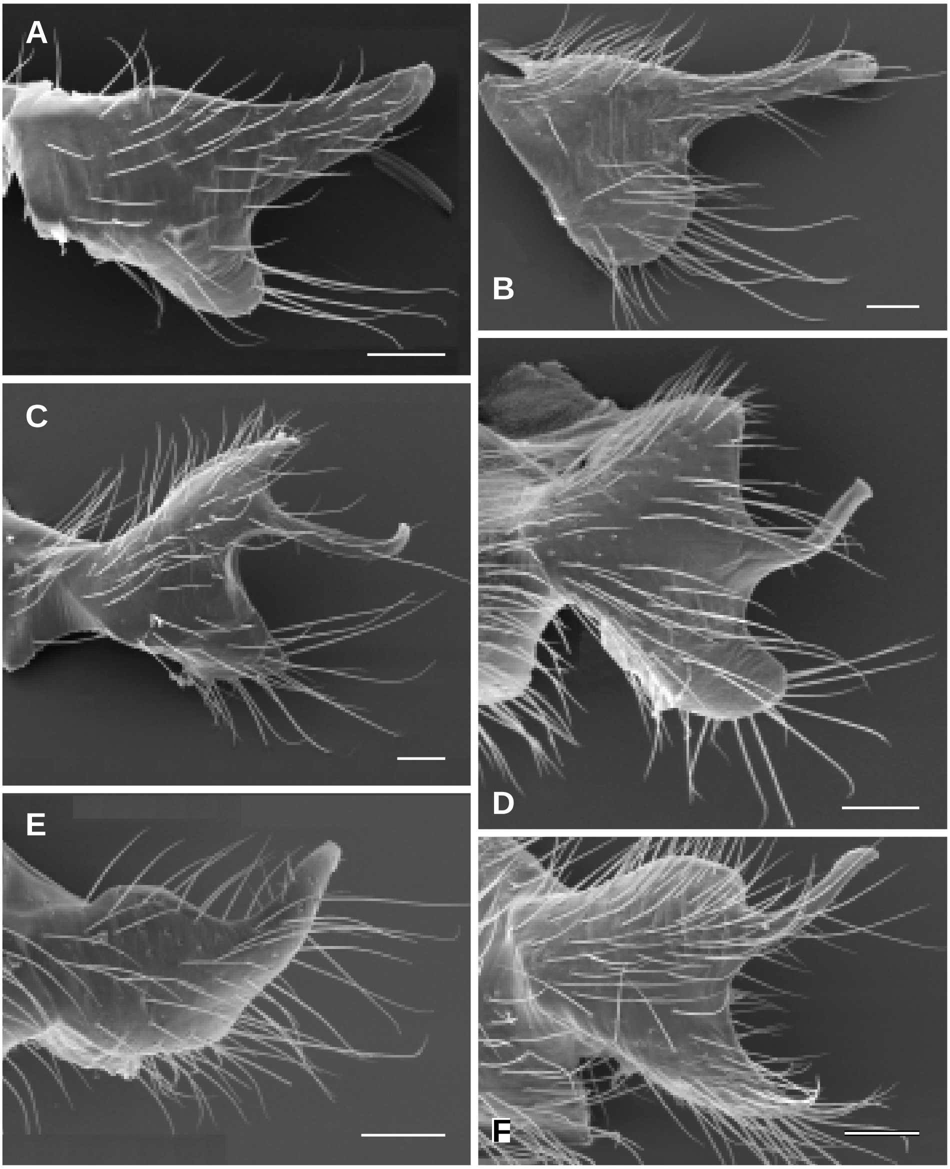

Fig. 7. Surstyli lateral. A. *Euscelidia pallasii*. B. *E. natalensis* sp. n. C. *E. bequaerti*. D. *E. acuminata* sp. n. E. *E. splendida* sp. n. F. *E. longibifida* sp. n. Scale lines = 100 µm.

pointed; *Wings* Figs 8A–C - few microtrichia or densely covered with microtrichia, hyaline with or without microtrichia (microtrichia evenly scattered on remigium, but wings still hyaline) or opaque (wings brown coloured), veins generally brown, sometimes anterior veins pale yellow in proximal half or entirely pale yellow; ptero indistinct or distinct, light brown to brown; all marginal cells open, cell d terminating in 2 (Fig. 8C) or 3 (Figs 8A, B) veins, cell a_2 generally broad, sometimes narrow; hlt yellow or brown.

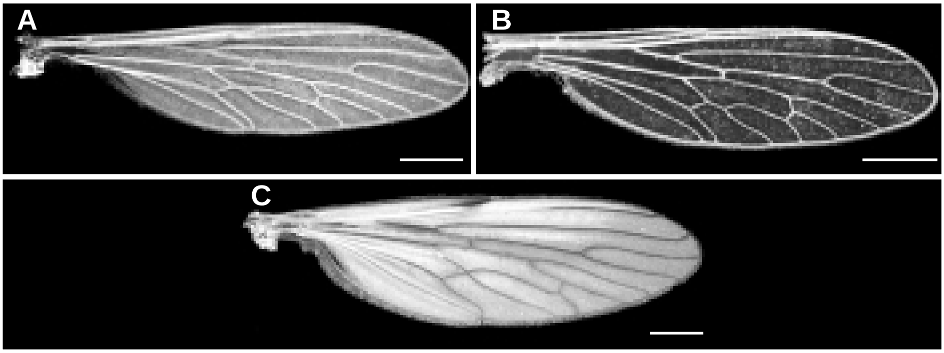

Fig. 8. Wings. A. *Euscelidia longibifida* sp. n. B. *E. pulchra* sp. n. C. *E. lata* sp. n. Scale lines = 1 mm.

Abdomen: T generally entirely pruinose, but sometimes with apruinose spot proximally, sometimes ♀ T8 apruinose, T1 generally with long setae laterally, T2 generally in proximal third to half with setae laterally, remaining T with short setae; S pruinose, S2 generally apruinose medially.

♂ *terminalia*: (labelled illustrations in Figs 18, 31, 32, 43) Sur with either pointed distal tip (Figs 7A–F) or ending blunt (e.g. Fig. 57C), lobes dorsally and ventrally present or absent (Figs 31C, 43C), sometimes distal tip sharply bent inwards (Fig. 28G); hypd enlarged, ventral margin straight (Fig. 43C) or distally bent upwards (Fig. 31C) and then with (Fig. 31B) or without separated lobes (in posterior view) (Figs 11F, 13F); gonst small to large, often lat pr gonst (Fig. 31C) closely related to gonst present (not always determinable); *Aedeagus* - aed generally only seen in dorsal view as a block between the aed apod and d aed shea (Fig. 32B); d aed shea short, terminating blunt (Figs 5E, F, 32A, B), or medium (not extending hypopygium) (Figs 4A, C, E, 43D) to long (extending hypopygium) and tubular (Figs 28K–N), or forming an open extension without covering ductus ejaculatorius and extending beyond gonp (sheath-like) (Figs 18A, B), lat pr aed sometimes present, short (Figs 5E, 6B, 18A) or long (Figs 5A, 6D, 21E, G), extending gonp; v aed shea generally composed of 2 sclerites, originating from d aed shea, and fused dorsally, articulation with muscles laterally and on tip, sometimes expanded plate-like (Figs 4C, F); lat apod simple, cylindrical, proximally bifurcated (Fig. 58I), or triangular (Fig. 24F); aed apod rounded, varying diameter (Figs 18A, 32A, 43D).

♀ *terminalia*: (note: comparative studies of all species were not carried out) Unspecialised ovipositor; S9 with macrosetae distally; segment 9 generally hidden under T8 (Figs 58D-F) (see also illustration of spermathecae in Theodor 1976: 22 (Fig. 22)).

Distribution Fig. 1: Species of *Euscelidia* are found throughout the Afrotropical Region, in the Palaearctic Region in Egypt, from Greece to Turkmenistan and in China, and in the Oriental Region from India to the Philippines.

Descriptions and redescriptions of species

Note: Species are arranged alphabetically except for representatives of the *brunnea* and *datis* species-groups, which are arranged under the respective group.

Euscelidia abbreviata sp. n.

Figs 9A, C, D, 10, 47

Etymology: Latin adjective *abbreviatus* = shortened; refers to the short postpedicel.

Diagnosis: The species is distinguished from congeners by the short pped (as short as scp and ped combined), the broad apruinose median stripe and 2 apruinose lateral spots on the sct, and the few microtrichia on the wings.

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, 6 macrosetae; prob and plp brown-black, setae white; oc tr white pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp brown, brown setae ventrally, white pruinose; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, short, as short as scp and ped combined, white pruinose proximally and ventrally; apsel brown.

Thorax: Brown to black; ppro peg small, distinct, silver pruinose; sct predominantly black, antero-laterally brown, predominantly silver pruinose, median stripe, not reaching posterior margin, and 2 lateral spots, not reaching anterior and posterior margins, apruinose, white setae on margins; macrosetae: black, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s short, brown; *Legs* - brown; fem brown, setae white, meta fem slightly clubbed; tib brown; tar brown, setae black; emp long, longer than half of length of clw; *Wings* - hyaline, very few microtrichia in distal half; ptero distinct, brown; cell d terminating in 2 veins; hlt brown.

Abdomen: Brown; T brown pruinose, T1 with long white setae laterally, T2 in proximal third with white setae laterally, remaining T with short white and yellow setae, S grey

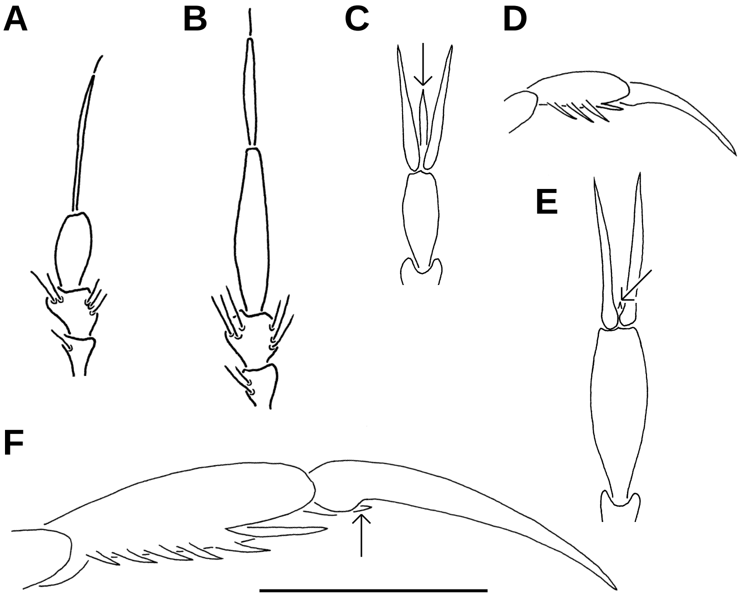

Fig. 9. Antenna lateral. A. *Euscelidia abbreviata* sp. n. B. *E. venusta* sp. n. Claw and empodium. C, D. *E. abbreviata* sp. n. C. Dorsal. D. Lateral. E. *E. venusta* sp. n. Dorsal. F. *E. lata* sp. n. Lateral. Arrows point at empodium. Scale line = 1 mm.

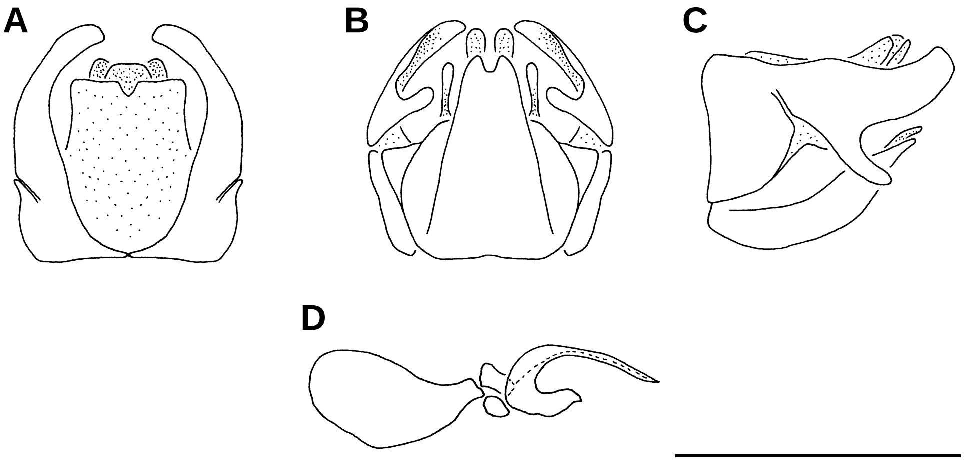

Fig. 10. ♂ terminalia of *Euscelidia abbreviata* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. Scale line = 1 mm.

pruinose; ♂ *terminalia* Fig. 10 - sur blunt, rounded distally, narrow ventral lobe proximally; hypd ventral margin straight; gonst long; d aed shea tubular, medium length; lat apod simple.

Type material - The ♂ holotype is labelled 'S. India: Karnataka. Mudigere area, c. 900 m 2–10.xi.1977 Zool. Mus. Copenhagen Exp. / HOLOTYPE *Euscelidia abbreviata* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is directly mounted, is in good condition (abdomen broken, attached together with ♂ terminalia to specimens pin in micro vial), and is deposited in the ZMUC.

A ♀ paratype is labelled 'Nilgiri Hills Gudalur S, India iv 49 [iv.1949] (date handwritten) / P.S. Nathan Collector / PARATYPE *Euscelidia abbreviata* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is double mounted (attached to triangular piece of cardboard), is in good condition (left meso leg and meta tib broken), and is deposited in the BMNH.

Type locality and distribution (Fig. 47): India, Karnataka Province, Mudigere, 13°07'N 75°37'E. India.

Euscelidia acuminata sp. n.

Figs 6A, B, 7D, 11F–K, 29

Etymology: Latin adjective *acuminatus* = pointed; refers to the pointed hypandrium.

Diagnosis: The species is distinguished from congeners by the short, stiff macrosetae comprising the mystax, the predominantly brown pruinose sct, and features of the ♂ terminalia (hypd bent upwards and pointed, lat pr aed short, extending gonp).

Description: *Head:* Dark brown; fc silver pruinose, fc gib indistinct, mystax white, many stiff macrosetae; prob and plp dark brown, white setae; oc tr black, silver pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp brown, white setae ventrally, white pruinose; ped brown, white setae ventrally and brown setae dorsally, white pruinose; pped light brown, white pruinose; apsel hyaline.

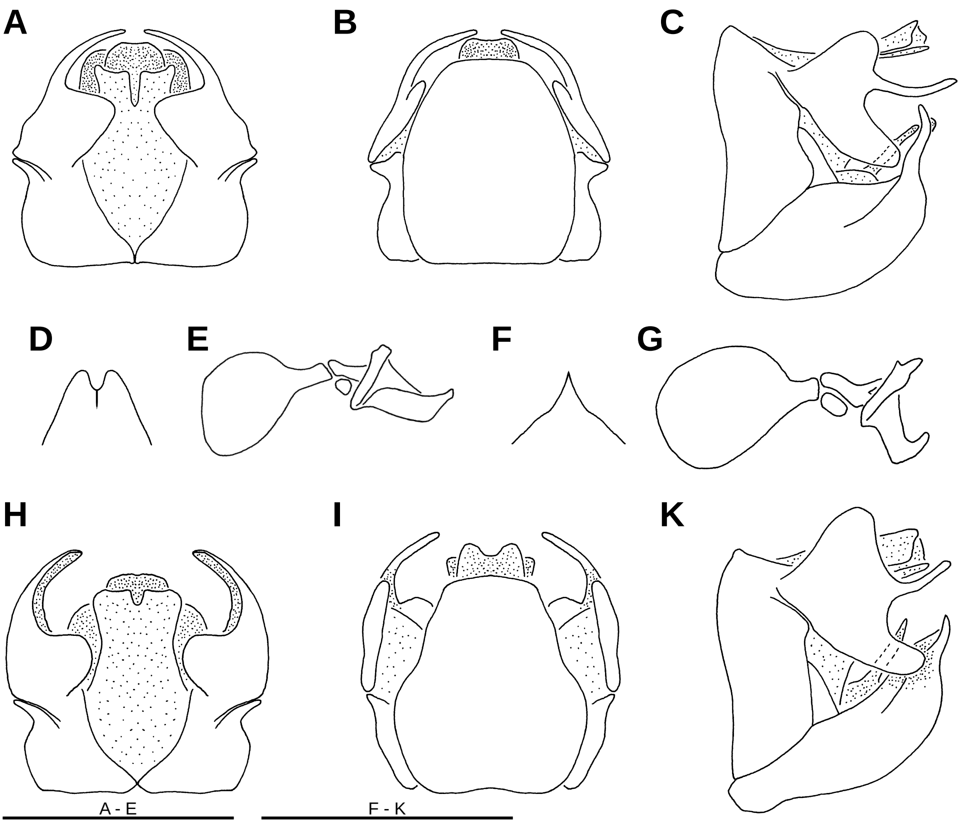

Fig. 11. ♂ terminalia. A–E. *Euscelidia peteraxi* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Hypandrium posterior. E. Aedeagus lateral. F–K. *E. acuminata* sp. n. F. Hypandrium posterior. G. Aedeagus lateral. H. Dorsal. I. Ventral. K. Lateral. Scale lines = 1 mm.

Thorax: Black; ppro peg small, distinct, silver pruinose; sct generally black, sometimes orange on anterior margin, brown pruinose, margins silver pruinose, 2 narrow median longitudinal stripes, not reaching posterior margin, and 2 lateral stripes, not reaching anterior and posterior margins, apruinose, yellow setae on margins; macrosetae: 1 white npl s, 1 black spal s; sctl silver pruinose, ds sctl s and sctl s short, white; *Legs* - yellow to brown; fem yellow proximally, brown distally, white setae, meta fem clubbed, club with short white setae; tib yellow proximally, brown distad, pale yellow stripe not reaching tip anteriorly; first tar yellow, brown distad, remaining tar brown, setae black; emp minute; *Wings* - hyaline, but microtrichia evenly scattered on remigium; ptero distinct, light brown; cell d terminating in 3 veins; hlt light brown.

Abdomen: Black; T predominantly brown pruinose, anterior, lateral, and posterior margins grey pruinose, T1 with long brown setae laterally, T2 in proximal third with few brown setae laterally, remaining T with short yellow and brown setae, S grey pruinose; ♂ *terminalia* Figs 11F–K - sur pointed distally, lobe dorsally and ventrally of similar size; hypd bent upwards, pointed at apex; d aed shea short, lat pr aed short, extending gonp; lat apod simple.

Type material - The ♂ holotype is labelled ‘SOUTH WEST AFRICA 2217Ca Windhoek Dist. Auasberge 21 km. S. Windhoek, 1800 m. 31-1-1974, ME Irwin sandy wash in mountains / HOLOTYPE *Euscelidia acuminata* sp. nov. det. T. Dikow 2001 (red label)’. The specimen is double mounted (minuten in block of foam), is in excellent condition, and is deposited in the NMSA.
The 3♀♀ 4♂♂ paratypes have same labels as holotype except ‘PARATYPE *Euscelidia acuminata* sp. nov. det. T. Dikow 2001 (yellow label)’. The specimens are double mounted (minuten in block of foam), are in very good condition (1 ♀ with cracked sct), and are deposited in the NMSA.

Type locality and distribution (Fig. 29): Namibia, Auasberge (21 km S Windhoek), 22°44'S 17°00'E. Angola, Namibia.

Material examined: ANGOLA: 1♂ Capangombe, 15°05'S 13°10'E, 17–20.x.1974; NAMIBIA: 1? Outjo, 20°14'S 15°40'E; 1♂ Khan River, 21°47'S 15°55'E, 27.iii.1984; 1♀ 2♂♂ 1? Hochfeld, 21°29'S 17°50'E, 18.iii.1984; 1♂ Regenstein, 22°43'S 17°01'E, 8.ii.1972; 1♀ 1♂ Witvlei, 22°26'S 18°31'E, 17.iii.1984. Depository: BMNH, NMSA.

Remarks: A specimen of undeterminable gender from South Africa’s Eastern Cape Province is housed in the NMSA, which is very similar to this species. Because of the geographic distance between this locality and the type locality and the poor condition of this specimen I am not able to make further comments about this specimen. The label data are as follows: 1? Fullerton [33°10'S 23°49'E], ii.1925, Brauns (NMSA).

Euscelidia adusta sp. n.

Figs 12A–D, 59

Etymology: Latin adjective *adustus* = brown, tanned; refers to the overall brown coloration of the species.

Diagnosis: The species is distinguished from congeners by the overall brown coloration, the light brown pruinose sct, and the few microtrichia on the wings.

Description: *Head:* Dark brown; fc silver pruinose, fc gib indistinct, mystax white, 7 to 8 macrosetae; prob and plp brown, setae white; oc tr white pruinose dorsally; occ silver pruinose, setae white and brown; *Antennae* - scp brown, brown setae ventrally, white pruinose; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose proximally and ventrally; apsel brown.

Thorax: Brown; ppro peg small, distinct, silver pruinose; sct predominantly pruinose, holotype with 2 narrow longitudinal stripes, reaching anterior margin, apruinose, only right hand side with large antero-lateral apruinose spot, paratype without apruinose stripes and with 2 apruinose spots posterior to trn sut; macrosetae: brown, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s long, white; *Legs* - yellow to brown; fem light brown, except for proximal and distal tip, which is pale yellow, meta fem slightly clubbed; tib light brown, pale yellow stripe not reaching tip anteriorly; first tar on pro and meso leg yellow, brown distad, remaining tar brown, all tar brown on meta leg, setae black; emp minute; *Wings* - hyaline, veins brown; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Brown; T grey pruinose, T2 with apruinose spot anteriorly, T1 with long white setae laterally, T2 in proximal half with white setae laterally,

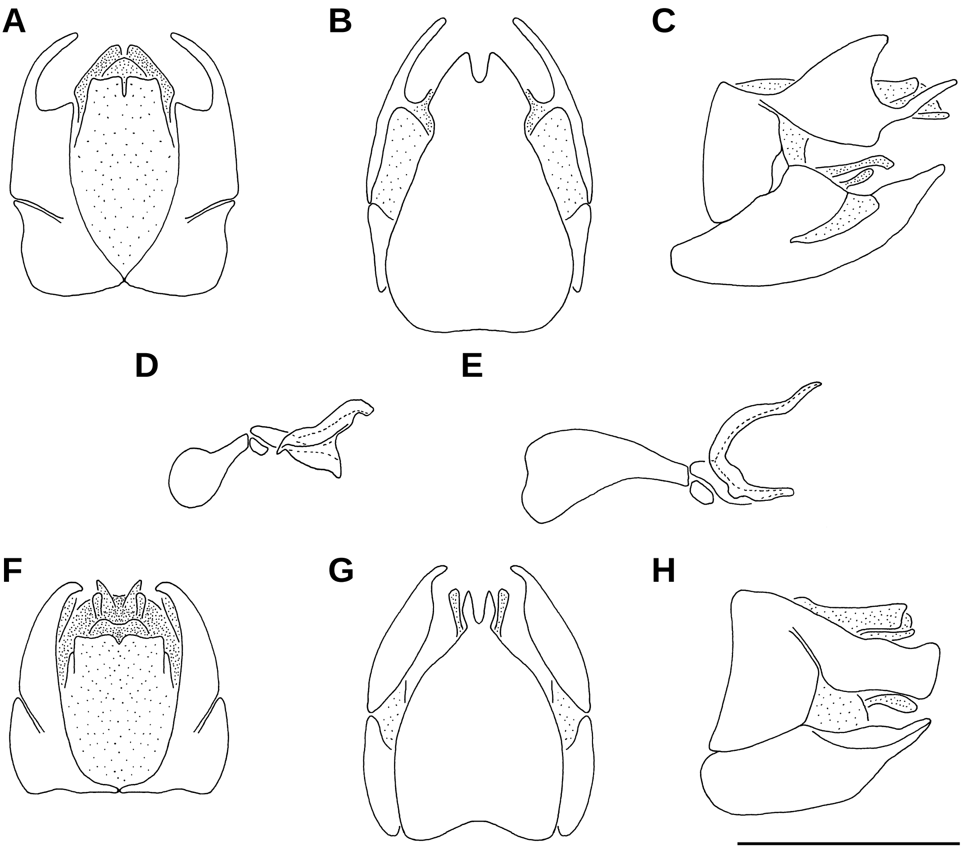

Fig. 12. ♂ terminalia. A–D. *Euscelidia adusta* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. E–H. *E. anthrax*. E. Aedeagus lateral. F. Dorsal. G. Ventral. H. Lateral. Scale line = 1 mm.

remaining T with short white and yellow setae, S grey pruinose; ♂ *terminalia* Figs 12A–D - sur pointed distally, lobe dorsally and ventrally, dorsal lobe large; hypd ventral margin straight, d aed shea tubular, medium length; lat apod simple.

Type material - The ♂ holotype is labelled '2/12 95 [2.xii.1895] / N. Kamerun [northern Cameroon] Johann-Albrechtshöhe L. Conradt 88 (blue label) / HOLOTYPE *Euscelidia adusta* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is directly mounted, is in very good condition (right pped broken; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the ZMHB.

The ♂ paratype is labelled 'Uganda. District Masindi Budongo Forest n. Sonso 1°45'N, 31°35'E 19.-30.VI.95 [1995] Th. Wagner leg. / PARATYPE *Euscelidia adusta* sp. nov. det. T. Dikow 2002 (yellow label)'. The specimen is directly mounted, is in excellent condition, and is deposited in the NMSA.

Type locality and distribution (Fig. 59): Cameroon, Johann-Albrechtshöhe, no co-ordinates available. Cameroon, Uganda.

Remarks: I examined a single ♀ specimen from Vumba, Zimbabwe, that is very similar to the male specimens, but has a number of conflicting features (emp about a quarter of length of clw, wing tip with many microtrichia). Because of these differences, the female gender, and the geographic distance between the distribution of the male specimens and Zimbabwe I am not certain about the status of this specimen. I will only provide the label data: 1♀ Zimbabwe, Vumba [19°04'S 32°45'E], 11.xi.1965, D. Cookson (NMSA).

Euscelidia anthrax Janssens, 1957

Figs 12E–H, 16

Euscelidia anthrax Janssens, 1957: 2; Oldroyd 1974: 20 1980: 356.

Diagnosis: The species is distinguished from congeners by the overall black coloration and dark wings.

Redescription: *Head:* Black; fc silver pruinose, fc gib distinct, mystax white, few macrosetae; oc tr apruinose; occ silver pruinose, brown setae dorsally and white setae ventrally; *Antennae* - scp and ped dark brown with brown setae, white pruinose; pped dark brown, white pruinose; apsel brown; *Thorax:* Black; sct predominantly apruinose, posterior margin and dorsad of wing base silver pruinose, white setae scattered on surface; macrosetae: black, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s long, brown; *Legs* - brown and yellow, pro and meso fem brown, meta fem yellow proximally, brown distad, slightly clubbed; tib brown, meta tib with yellow stripe not reaching tip anteriorly; first tar as long as 3 following tar combined; emp about a third of length of clw; *Wings* - densely covered with microtrichia, dark brown; ptero indistinct, brown; cell d terminating in 3 veins; hlt light brown; *Abdomen:* Black; T brown pruinose in proximal 3/4, grey pruinose in distal quarter, T2–3 apruinose in proximal 2/3, T1 with black setae, T2 with long brown setae laterally, remaining T with short brown setae (on brown pruinose area) and white setae (on grey pruinose area); ♂ *terminalia* Figs 12E–H - sur broad, only slightly pointed, ventral margin straight; hypd ventral margin straight; gonst long; d aed shea tubular, medium length; lat apod simple.

Type material - The ♂ holotype has to be considered lost. I was unable to locate the depository for the type specimen. Janssens stated that the type is deposited in the South African Institute for Medical Research, Pretoria, South Africa. The collection is now part of the NMSA, but the specimen could not be found there. However, I did not designate a neotype since the concept of the species is clear and there is no ‘exceptional need’ for a designation as requested by the International Code of Zoological Nomenclature (article 75).

Type locality and distribution (Fig. 16): Botswana, Tsessebe, 20°45'S 27°34'E. Botswana, Malawi, South Africa.

Material examined: MALAWI: 2♀♀ 1♂ 1? Mulanje, 15°57'S 35°37'E, 16+18+21.iv.1913; SOUTH AFRICA: *KwaZulu-Natal:* 1♀ Dukuduku, 28°22'S 32°24'E, 7–8.iv.1960; *Mpumalanga:* 3♀♀ Nelspruit, 2530DB, 1–2.xii.1976. Depository: BMNH, NMSA.

Euscelidia bechuana sp. n.

Figs 13A–E, 14

Etymology: Noun in apposition derived from the name Bechuanaland (previously used for Botswana); refers to the distribution of the species in this country.

Diagnosis: The species is distinguished from congeners by the three lateral apruinose spots on the sct and features of the ♂ terminalia (Figs 13A–E).

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brown, setae white; oc tr white pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp brown, brown setae ventrally, white pruinose; ped light brown, brown setae ventrally and dorsally, white pruinose; pped light brown, white pruinose; apsel hyaline.

Thorax: Orange-red to black; ppro peg small, distinct, silver pruinose; sct orange-red antero-laterally, predominantly silver pruinose, 1 antero-lateral circular apruinose spot, 2 lateral apruinose spots anterior and posterior to trn sut, sometimes 2 narrow longitudinal median apruinose stripes not reaching posterior margin present; macrosetae: 1 white

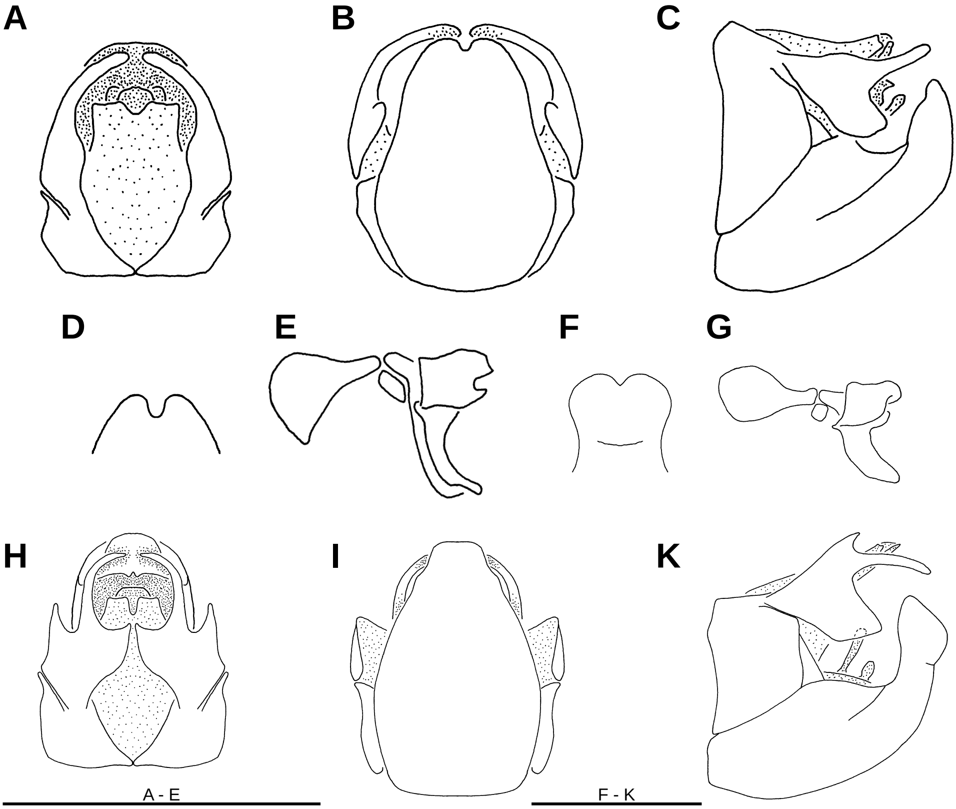

Fig. 13. ♂ terminalia. A–E. *Euscelidia bechuana* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Hypandrium posterior. E. Aedeagus lateral. F–K. *E. bequaerti*. F. Hypandrium posterior. G. Aedeagus lateral. H. Dorsal. I. Ventral. K. Lateral. Scale lines = 1 mm.

npl s, 1 black spal s; sctl silver pruinose, ds sctl s and sctl s long, brown; *Legs* - yellow to brown; fem light brown, meta fem pale yellow proximally, clubbed, club with brown stripe laterally; tib light brown, pale yellow stripe not reaching tip anteriorly; first tar yellow, brown distad, remaining tar brown, setae black; emp minute; *Wings* - hyaline, few microtrichia scattered on remigium, slightly brown stained, veins brown; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; brown pruinose medially, grey pruinose on anterior, lateral, and posterior margins, T1 with long brown setae laterally, T2 with few white setae laterally, remaining T with short yellow and brown setae, S grey pruinose; ♂ *terminalia* Figs 13A–E - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 lobes; d aed shea short, blunt; lat apod simple.

Type material - The ♂ holotype is labelled 'Malaise trap Serowe, Botswana Forchhammer leg. Date 4-x 1983 [4.x.1983] ('Malaise trap' and date handwritten) / HOLOTYPE *Euscelidia bechuana* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is directly mounted, is in good condition (left meta leg broken), and is deposited in the NMSA. 11 ♂ paratypes collected in Malaise traps by P. Forchhammer in Serowe or at Farmers Brigade 5 km SE of Serowe are also deposited in the NMSA and are labelled 'PARATYPE *Euscelidia bechuana* sp. nov. det. T. Dikow 2001 (yellow label)'. Collection dates: 2♂♂ ii.1983, 1♂ 14.ix.1983, 1♂ 5.xi.1983, 1♂ 28.ii.1985, 2♂♂ 2.i.1986, 1♂ iii.1986, 2♂♂ xi.1986, 1♂ xii.1989. They are directly mounted and in poor to good condition. Two ♂♂ paratypes are labelled 'S.W. AFRICA [Namibia] Ameib Farm 19 mls. [30 km] NW Karibib, 31.i.–2.ii.1972 / Southern African Exp. B.M. [British Museum] 1972–1 / PARATYPE *Euscelidia bechuana* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimens are directly mounted, are in good condition (1 ♂ with right legs broken and ♂ terminalia attached to specimens pin in micro vial), and are deposited in the BMNH.

Type locality and distribution (Fig. 14): Botswana, Serowe, 22°22'S 26°43'E. Botswana, Namibia.

Remarks: ♀♀ specimens cannot be determined with certainty, but examined material I consider as belonging to this species is listed here: BOTSWANA: 9♀ Serowe, 22°22'S 26°43'E, 15.x.1983, ix.1985, 2.i.1986, iii., iv., ix., xi., xii.1986, iii.1992; SOUTH AFRICA: *KwaZulu-Natal:* 1♀ Mfongosi, 27°18'S 32°16'E, ii.1917; 1♀ Umlaas road, 29°44'S 30°31'E, iv.1981; ZIMBABWE: 1♀ Vumba, 19°04'S 32°45'E, 3.iii.1931. Depository: BMNH, NMSA.

Euscelidia bequaerti Janssens, 1957

Figs 5D–F, 7C, 13F–K, 16

Euscelidia bequaerti Janssens, 1957: 5; Oldroyd 1980: 356.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose sct, the few microtrichia on the wings, and the apruinose proximal margins of the T2–4.

Redescription: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, 8–12 macrosetae; oc tr apruinose; occ silver pruinose, setae white; *Antennae* - scp and ped brown, setae brown; pped brown, white pruinose; apsel brown; *Thorax:* Black; sct black, sometimes 2 slightly red spots antero-laterally, predominantly apruinose, anterior, lateral, and posterior

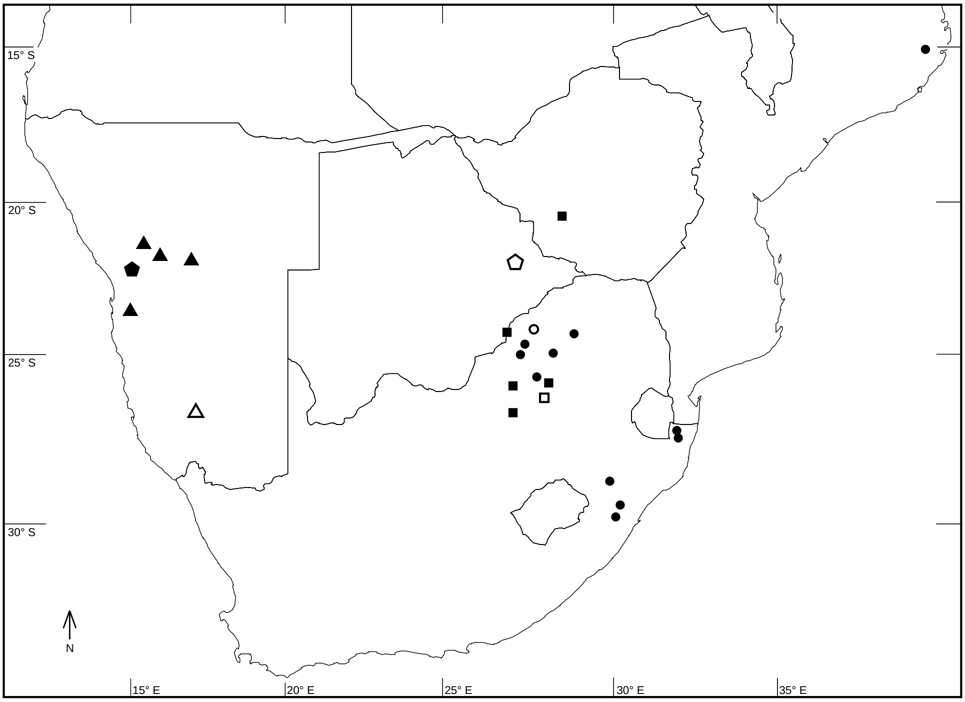

Fig. 14. Distribution. *Euscelidia bechuana* sp. n., pentagons; *E. fistula* sp. n., squares; *E. longibifida* sp. n., circles; *E. peteraxi* sp. n., triangles.

margins silver pruinose, white setae on pruinose area and few yellow setae scattered on apruinose part, presut dc setae sometimes distinct; macrosetae: white or black, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s long, white; *Legs* - yellow to brown; pro and meso fem light brown, meta fem pale yellow proximally, clubbed, club brown, light brown distally; tib brown, pale yellow stripe not reaching tip on meta tib anteriorly; emp minute (holotype with short emp); *Wings* - hyaline, few microtrichia scattered on remigium and margins, slightly brown stained; ptero distinct, brown; cell d terminating in 2 veins; hlt yellow; *Abdomen:* Black; predominantly brown pruinose, anterior and posterior margins narrowly grey pruinose, T2–4 in proximal half apruinose, T1 with long brown setae laterally, T2 in proximal half with white setae laterally, remaining T with white and brown setae, S grey pruinose, S2 in proximal half apruinose; ♂ *terminalia* Figs 13F–K - sur pointed distally, lobe dorsally and ventrally; hypd bent upwards, enlarged distally; d aed shea short, blunt, lat pr aed short; lat apod simple.

Type material - The holotype of undeterminable gender is labelled 'Elisabethville Congo Belge M. Bequaert 2-XII-1934 (date handwritten) / R.I.Sc.N.B. 24.236 Coll. M. Bequaert / E. Janssens det., 1956 *Euscelidia Becquaerti* n. sp. (letter 'c' in '*Becquaerti'* crossed out, handwritten except for 'E. Janssens det., 195') / HOLOTYPE *Euscelidia bequaerti* Janssens, 1957 by T. Dikow 2001 (red label)'. The specimen is directly mounted, is in poor condition (head broken (attached to label), antenna, meta legs, and abdomen broken), and is deposited in the ISNB.

Type locality and distribution (Fig. 16): DR Congo, Lubumbashi (former Elisabethville), 11°39'S 27°28'E. Cameroon, DR Congo, Ivory Coast, Mali, Malawi.

Material examined: CAMEROON: 2♀♀ Bossoum, 9°56'N 13°41'E, 1–10.vi.1914; IVORY COAST: 1♀ 2♂♂ 1? Comoe National Park, Kakpin Camp, 8°40'N 3°12'W, 16–18.iv.1989; MALAWI: 3♀♀ Chikangawa, 11°49'S 33°47'E, 27.ii.–1.iii.1987; MALI: 1♂ Segou, 13°26'N 6°15'W, 31.vii.1991. Depository: NMSA; ZMHB.

Euscelidia bicolor Janssens, 1954

Figs 15, 16

Euscelidia bicolor Janssens, 1954*a*: 123; Oldroyd 1980: 356.

Diagnosis: The species is distinguished from congeners by the predominantly brown pruinose sct, 2 lateral apruinose spots on the sct, and many setae arranged on pruinose surface on sct (not always present).

Redescription: *Head:* Black; fc silver pruinose, sometimes yellow pruinose, fc gib indistinct, mystax white, many macrosetae; oc tr white pruinose dorsally (sometimes apruinose); occ silver pruinose, white and yellow setae; *Antennae* - scp and ped brown, setae brown; pped brown, white pruinose; apsel hyaline; *Thorax:* Black; sct yellow pruinose medially, margins silver pruinose, 2 lateral spots, not reaching anterior and posterior margins, apruinose, sometimes long brown setae scattered on pruinose part; sctl white pruinose, ds sctl s and sctl s short or long, yellow; *Legs* - yellow to brown; pro and meso fem in proximal half yellow, distal half brown, meta fem in proximal half pale yellow, clubbed, club brown; pro and meso tib brown, pale yellow stripe anteriorly, meta tib yellow proximally, remaining part brown, pale yellow stripe not reaching tip anteriorly; emp minute; *Wings* - hyaline, few microtrichia scattered on remigium and distal margin; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown; *Abdomen:* Brown; T predominantly brown pruinose, grey pruinose laterally, T1 with long white setae laterally, T2 in proximal half with few white setae laterally, remaining T with white and yellow setae, S grey pruinose; ♂ *terminalia* Fig. 15 - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 lobes, sclerite situated just anterior to these lobes; d aed shea short, blunt; lat apod simple.

Type material - The ♂ holotype is labelled 'HOLOTYPUS (red label with black submarginal border) / TYPE (red label with black submarginal border) / Congo belge: P. N. U. [Parc National de l'Upemba] Lusinga (1.760 m.) 25-III-1947 Mis. G. F. de Witte. 50a / E. Janssens det., 1952 *Euscelidia bicolor* Em. Janss. [Emile Janssens] (handwritten except for 'E. Janssens det., 19')'. The specimen is double mounted (minuten in block of foam), is in very poor condition (left pped, left legs, right pro tarsus, right meso tib and tarsus broken; abdomen attached to foam block), and is deposited in the MRAC.

Five paratypes (3♀♀ and 2 of undeterminable gender) are from DR Congo, Upemba National Park, Lusinga (4) or Kamitangulu (1), with the following collection dates 12.iii.1947, 12–18.iii.1947, 15.iii.1947, 2.iv.1947, 16.iv.1947. The specimens are double mounted (minuten in block of foam), are in good to poor condition, and are deposited in the ISNB.

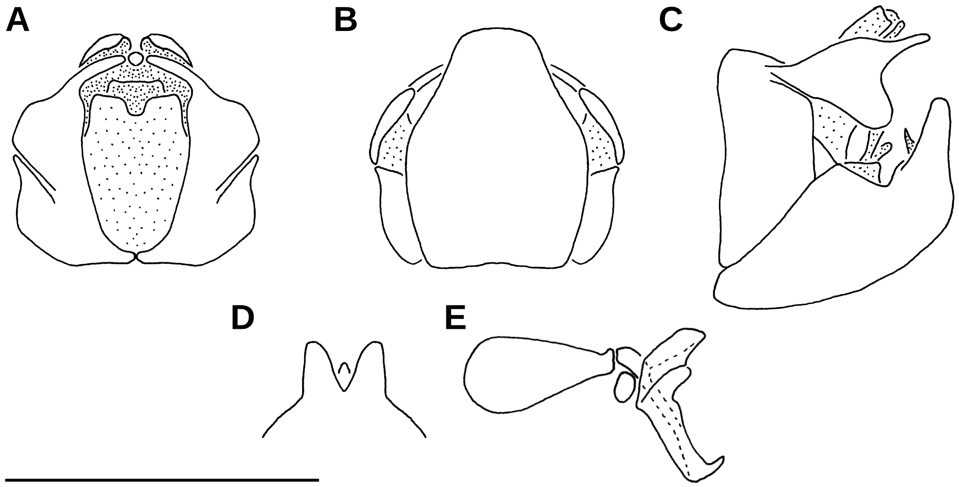

Fig. 15. ♂ terminalia of *Euscelidia bicolor*. A. Dorsal. B. Ventral. C. Lateral. D. Hypandrium posterior. E. Aedeagus lateral. Scale line = 1 mm.

Type locality and distribution (Fig. 16): DR Congo, Upemba National Park, Lusinga, 8°55'S 27°11'E. Angola, DR Congo, Malawi, Namibia, Zimbabwe.

Material examined: ANGOLA: 2♀♀ 1? Sa da Bandeira, 14°00'S 15°10'E, 27–29.iii.1972; 1♀ 2♂♂ Negola, 14°07'S 14°29'E, 25.iii.1972; MALAWI: 2♀♀ 1? Mponela, 1333DA, 26.ii., 7.iii.1987; 1♀ Ntchisi Forest Reserve, 1333BD, 24–25.ii.1987; NAMIBIA: 1? Hochfeld, 21°29'S 17°50'E, 18.iii.1984; ZIMBABWE: 1? Fungwi Nature Reserve, 16°50'S 32°20'E, vii.1928; 1♀ 1♂ Harare, 17°49'S 31°02'E, 21.ii.1943; 1♀ Umtali, 18°57'S 32°39'E, 8.iii.1964; 1♂ no locality data. Depository: BMNH; NMSA

Remarks: The species shows variation in the number of long setae on the sct. Sometimes no such long setae are present, but the type specimens have many long setae scattered on the sct.

Euscelidia bishariensis Efflatoun, 1937

Figs 16, 17A–D

Euscelidia bishariensis Efflatoun, 1937: 420; Hull 1962: 305; Theodor 1976: 21; Oldroyd 1980: 356.

Diagnosis: The species is distinguished from congeners by the densely grey or yellow pruinose sct with two narrow median apruinose stripes and two lateral apruinose stripes, the apruinose proximal half of abdominal T2, and features of the ♂ terminalia (d aed shea laterally flattened).

Redescription: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, 10 macrosetae; oc tr silver pruinose dorsally; occ silver pruinose, setae white and yellow; *Antennae* - scp yellow, yellow setae ventrally; ped yellow, yellow setae dorsally and ventrally; pped light brown, white pruinose; apsel light brown; *Thorax:* Black; sct silver pruinose, 2 narrow median longitudinal stripes, not reaching posterior margin, and 2 lateral stripes, not reaching anterior margin, apruinose,

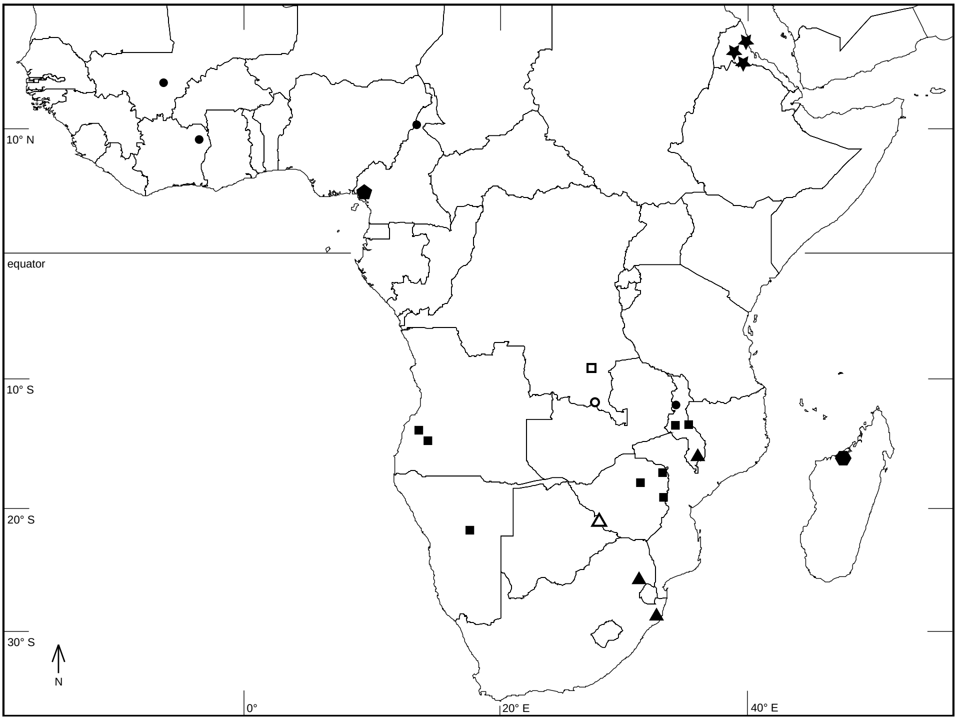

Fig. 16. Distribution. *Euscelidia anthrax*, triangles; *E. bequaerti*, circles; *E. bicolor*, squares; *E. bishariensis*, stars; *E. discors*, pentagon; *E. fastigium*, hexagon.

white setae on pruinose area; macrosetae: white, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s short, white; *Legs* - pale yellow to brown; pro and meso fem yellow, meta fem pale yellow proximally, brown distad, clubbed; pro and meso tib yellow, meta tib brown, pale yellow stripe not reaching tip anteriorly; emp short, about a quarter of length of clw; *Wings* - hyaline, brown stained, few microtrichia scattered on remigium and margins; ptero distinct, light brown; cell d terminating in 2 veins; hlt light brown; *Abdomen:* Black; T predominantly brown pruinose, anterior, lateral, and posterior margins grey pruinose, T2 in proximal half apruinose dorsally, T1 with white setae laterally, T2 with few white setae laterally, remaining T with yellow and white setae, S grey pruinose, S2 apruinose proximally; ♂ *terminalia* Figs 17A–D - sur pointed distally, small lobe ventrally; hypd ventral margin straight; d aed shea laterally flattened; lat apod simple.

Type material - The type specimens have to be considered lost. I was unable to locate the depository.

Type locality and distribution (Fig. 16): Sudan, Elba, Gebel, 21°10'N 36°35'E. Efflatoun stated the type locality to be Gebel Elba in the south-eastern desert in Egypt. The only place I was able to find is Elba in north-eastern Sudan, lying close to the border of present day Egypt. Additionally to the specimens examined, the species is known to occur in Sudan in the Afrotropical Region (Oldroyd 1980) and Egypt in the Palaearctic Region (Lehr 1988).

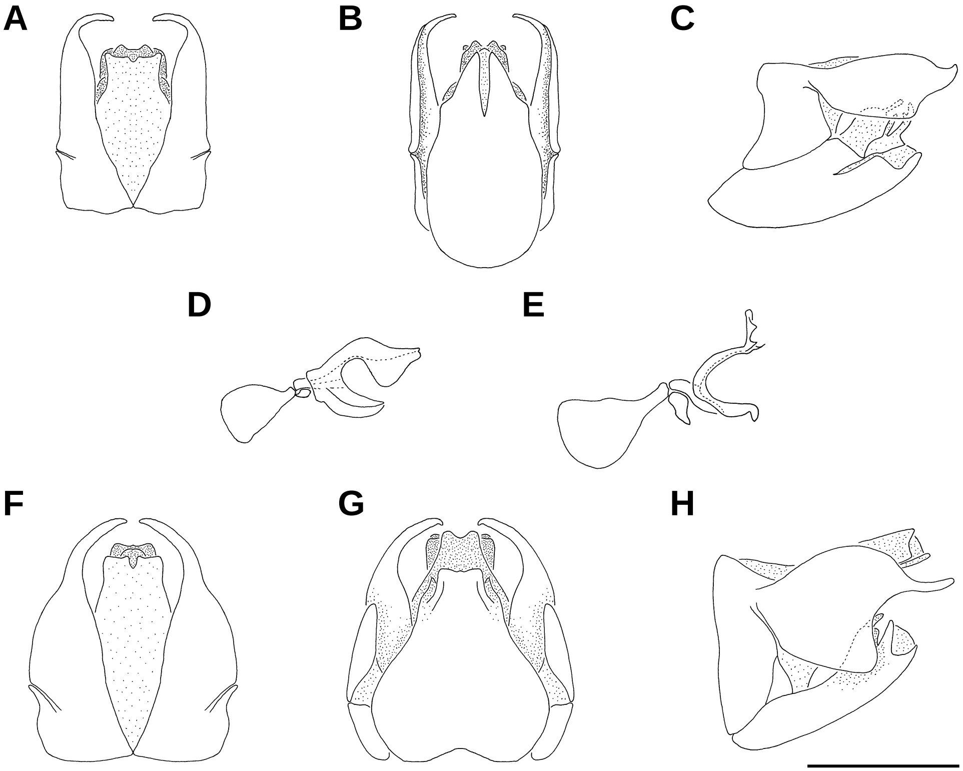

Fig. 17. ♂ terminalia. A–D. *Euscelidia bishariensis*. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. E–H. *E. cacula* sp. n. E. Aedeagus lateral. F. Dorsal. G. Ventral. H. Lateral. Scale line = 1 mm.

Material examined: ERITREA: 1♀ Sheb, 16°02'N 39°14'E, 11.iii.1955; 1♀ 1? Ailet, 15°33'N 39°09'E, 18.ii.1956; 3♀ ♀ 1♂ 2?? Wadi Damas, 15°30'N 39°11'E, 14.ii.1956; 1♀ Dongollo Basso, 14°41'N 38°50'E, 7.ii.1957; 1♀ Jebel Gedem, 9.ii.1956. Depository: BMNH.

Euscelidia brunnea species-group

Diagnosis of species: All representatives (*brunnea*, *ochricornis*, and six new species (*atrata*, *cana*, *capensis*, *natalensis*, *notialis*, *vallis*)) of this group are distinguished from congeners by the sheath-like development of the dorsal aedeagal sheath (Figs 5A–C, 18), which is open and extending the gonopore. Species are mainly distributed in southern Africa while one species is found in northern DR Congo. (Note: The use of this species-group does not intend any ranking of these species as a subgenus or even a genus.)

Euscelidia atrata sp. n. (*E. brunnea* species-group)

Figs 20A–E, 59

Etymology: Latin adjective *atratus* = dressed in black; refers to the dark wings and legs.

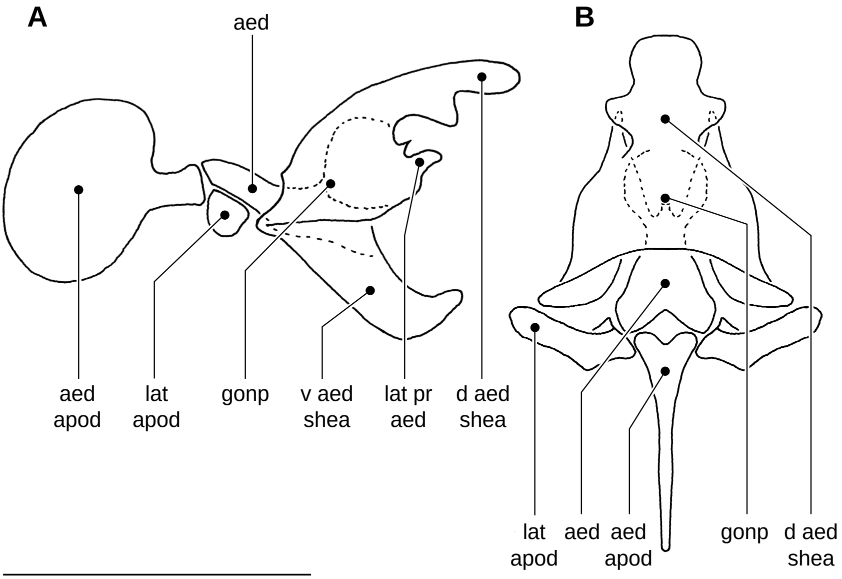
A
aed
B
aed apod
lat apod
gonp
v aed shea
lat pr aed
d aed shea
lat apod
aed
aed apod
gonp
d aed shea

Fig. 18. Aedeagus of *Euscelidia ochricornis*. A. Lateral. B. Dorsal. Scale line = 1 mm.

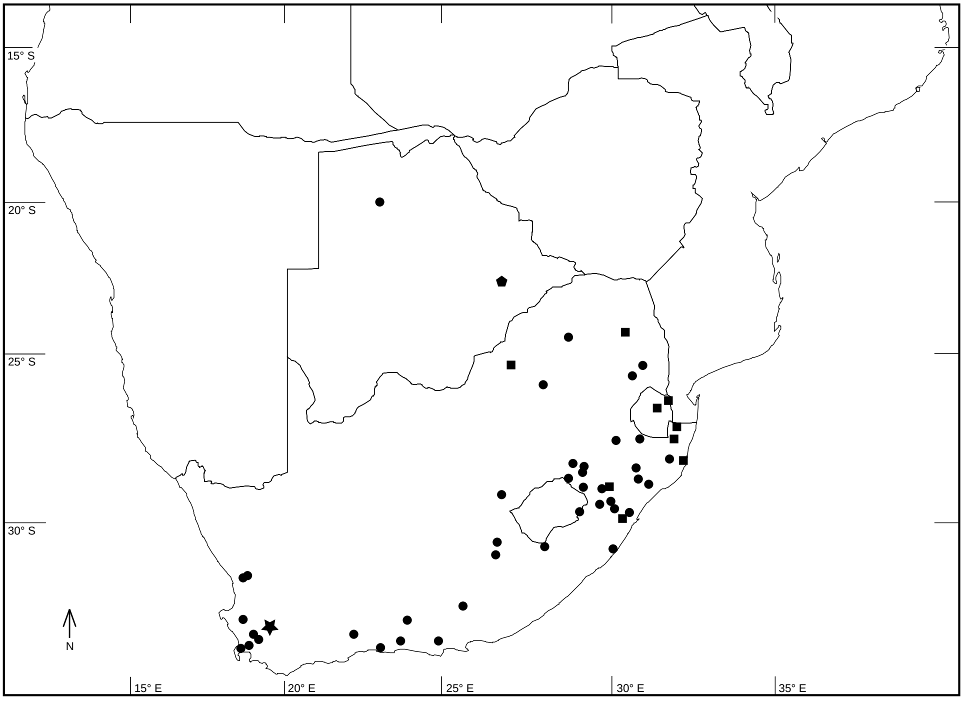
15° S
20° S
25° S
30° S
N
15° E
20° E
25° E
30° E
35° E

Fig. 19. Distribution. *Euscelidia brunnea*, circles; *E. capensis* sp. n., star; *E. ochricornis*, squares; *E. pipinna* sp. n., pentagon.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose sct, dark brown coloured wings, predominantly dark brown legs, and features of the ♂ terminalia (d aed shea open extending gonp).

Description: *Head:* Black; fc yellow pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brownish-black, setae white; oc tr white pruinose dorsally; occ silver pruinose, with apruinose parts, setae white; *Antennae* (pped broken) - scp brown, brown setae ventrally, white pruinose; ped brown, brown setae ventrally and dorsally, white pruinose.

Thorax: Black; ppro peg small, distinct, silver pruinose; sct predominantly apruinose, anterior, lateral, and posterior margins grey pruinose, long brown setae on anterior and lateral margins; macrosetae: black, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s long, brown; *Legs* - yellow and dark brown; pro and meso fem yellow proximally, remaining part dark brown, meta fem in proximal half yellow, distal half dark brown, slightly clubbed; pro and meso tib brown, pale yellow stripe not reaching tip anteriorly, meta tib pale yellow proximally, remaining part dark brown, pale yellow stripe anteriorly in proximal half; all tar on pro and meso leg brown, first tar on meta leg yellow, remaining tar brown, setae black; emp minute; *Wings* - densely covered with microtrichia and

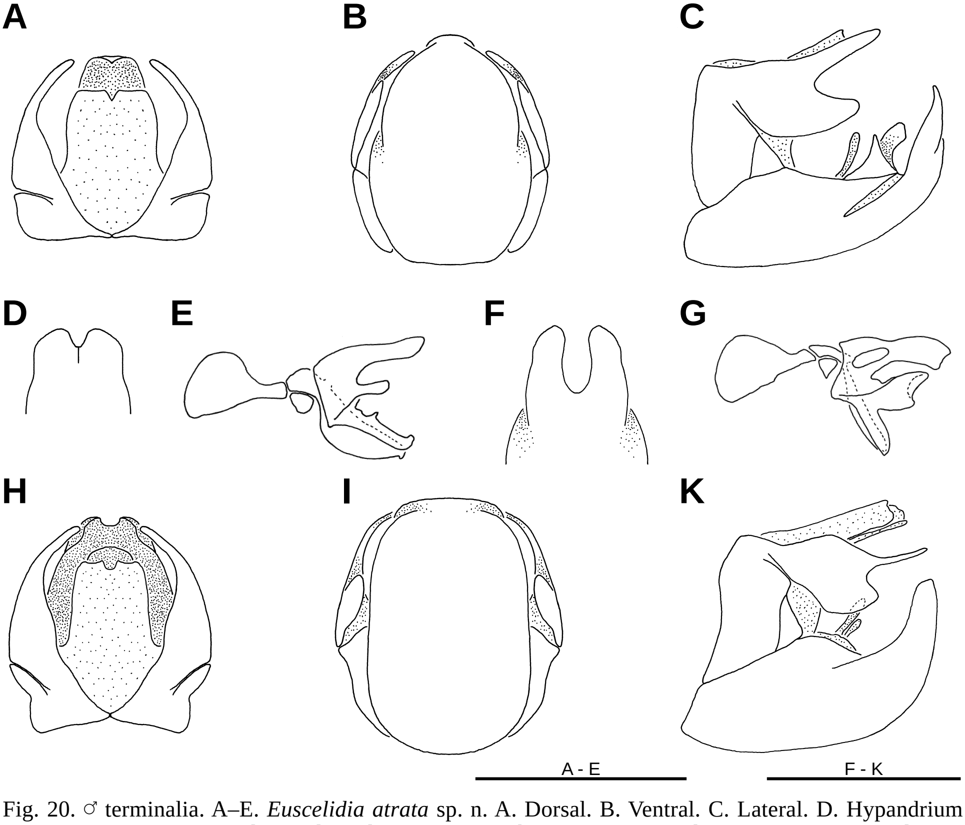

Fig. 20. ♂ terminalia. A–E. *Euscelidia atrata* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Hypandrium posterior. E. Aedeagus lateral. F–K. *E. notialis* sp. n. F. Hypandrium posterior. G. Aedeagus lateral. H. Dorsal. I. Ventral. K. Lateral. Scale lines = 1 mm.

dark brown coloured; ptero not distinguishable; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; T brown pruinose medially and grey pruinose on anterior and posterior margins, T1 with long brown setae laterally, T2 in proximal half with white setae laterally, remaining T with short white and yellow setae, S grey pruinose; ♂ *terminalia* Figs 20A–E - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 short lobes, sclerite situated posteriorly to gonst; d aed shea open, extending gonp, lat pr aed short; lat apod simple.

Type material - The ♂ holotype is labelled 'Congo Belge, P.N.G. [Garamba National Park] Miss. H. De Saeger Mt Moyo, 29-vii-52 [29.vii.1952] H. De Saeger. 3844 / *Euscelidia bicolor* J. det. H. Oldroyd 1966 (handwritten except for 'det. H. Oldroyd 19') / HOLOTYPE *Euscelidia atrata* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is double mounted (minuten in block of foam), is in good condition (pped and left meso leg broken, wings damaged; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the BMNH.

Type locality and distribution (Fig. 59): DR Congo, Garamba National Park, Mount Moyo, 4°06'N 29°27'E (co-ordinates for Garamba National Park). DR Congo.

Euscelidia brunnea (Loew, 1858), **comb. n.** (*E. brunnea* species-group)

Figs 19, 21F

Leptogaster brunneus Loew, 1858: 353; 1860: 103; Hull 1962: 300; Oldroyd 1980: 357.

Diagnosis: The species is distinguished from congeners by the short appressed pruinosity on the sct and features of the ♂ terminalia (d aed shea open, extending gonp, lat pr aed short).

Redescription: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; oc tr brown pruinose dorsally; occ in upper half brown on lower half silver pruinose, setae white; *Antennae* - scp and ped brown, setae brown; pped brown, white pruinose; apsel brown; *Thorax:* Black; sct bluish-black, covered with dense, short, brown pruinosity, 2 median narrow longitudinal stripes shine through the pruinosity, lateral and posterior margins silver pruinose, few white setae on margins; macrosetae: black, 1 npl s, 1 spal s, 1 pal (not always present); sctl silver pruinose, ds sctl s and sctl s short, white; *Legs* - yellow to brown; fem yellow proximally, light brown distad, meta fem with brown stripes laterally; tib brown, pale yellow stripe anteriorly; emp minute; *Wings* - hyaline, few microtrichia scattered on remigium and margins; ptero indistinct, light brown; cell d terminating in 2 veins; hlt yellow; *Abdomen:* Black; T brown pruinose dorsally, yellow pruinose laterally, T1 with yellow setae, remaining T with yellow setae, S yellow pruinose; ♂ *terminalia* Fig. 21F - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 lobes; d aed shea open, extending gonp, lat pr aed short; lat apod simple .

Type material - The holotype of undeterminable gender is labelled 'R. / 262 / 83 52 (red label) / 95. / *Leptogaster brunneus* / HOLOTYPE *Leptogaster brunneus* Loew, 1858 by T. Dikow 2001 (red label)'. The specimen is double mounted (minuten in block of foam), is in relatively good condition (abdomen broken, T1–3 attached to specimens pin on a piece of cardboard), and is deposited in the NHRS.

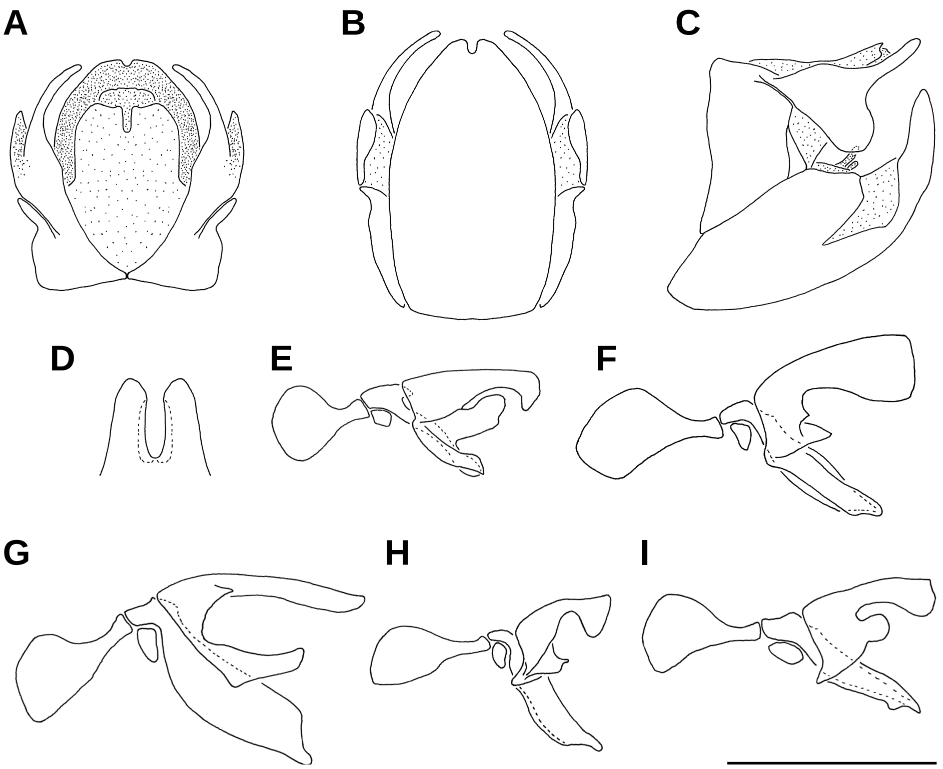

Fig. 21. ♂ terminalia. A–E. *Euscelidia natalensis* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Hypandrium posterior. E. Aedeagus lateral. F–I. Aegeagi lateral. F. *E. brunnea*. G. *E. cana* sp. n. H. *E. capensis* sp. n. I. *E. vallis* sp. n. Scale line = 1 mm.

Type locality and distribution (Fig. 19): South Africa, 'Caffraria', no exact co-ordinates available. The type specimens were collected by Wahlberg, who travelled in south-eastern South Africa (Usher 1972). Botswana, South Africa.

Material examined: BOTSWANA: 1♀ 1♂ Nata to Maun, 19°58'S 23°25'E, 26.xii.1980; SOUTH AFRICA: *Eastern Cape Prov:* 1♀ Maclear, 30°51'S 28°11'E, 3.ii.1992; 1♀ Huguenot, 31°04'S 26°36'E, ii.1932; 1♂ Hankey area, 3325CC, 1–10.xii.1967; 1♀ Alicedale [several such localities], 21.i.1982; *Free State Prov:* 1♂ Harrismith, 28°13'S 29°04'E, 4.xii.1991; 1♀ Harrismith, ii.1927; 1♀ Thaba Nchu, 2926BA, 26.iii.1982; *Gauteng Prov:* 3♀♀ 1♂ Pretoria, 25°45'S 28°10'E, 3.iv.1985; *KwaZulu-Natal:* 1♀ Farm Gelykwater, 27°30'46''S 30°25'01''E, 1.xii.1999; 1♂ Itala Game Reserve, 27°27'S 31°13'E, 10–23.xii.1992; 1♀ Nkandla Forest, 28°43'S 31°08'E, 19.i.1984; 1♀ 1♂ Melmoth, 28°35'S 31°23'E, 15.iii.1987; 1♀ 2?? Van Reenen, 28°22'S 29°23'E, 1–22.i.1927; 1♀ Babanango, 28°22'S 31°05'E, 14.iii.1987; 1♂ Royal Natal National Park, 28°44'S 28°55'E, 6–10.xii.1984; 1♀ Eshowe Dlinza Forest Res., 2831CD, 20–23.xi.1978; 2♀♀ Eshowe, 21.xii.1985; 1♀ Goudhoek, 28°23'S 31°05'E, 24.ii.1990; 1♀ Cathkin, 28°59'S 29°25'E, 19–21.ii.1993; 2♀♀ Hluhluwe, 28°05'S 32°05'E, 29.xi.1973; 1♀ 1♂ Karkloof, 29°13'S 30°16'E, 12.xii.1978; 1♀ Howick, 2930AC, 15.xii.1979; 1♀

1♂ Howick, 1904; 1♂ Bishopstowe, 2930CB, 11.xii.1981; 3♀♀ 3♂♂ Bishopstowe, 2930CB, 11.ii.1981; 2♀♀ 1♂ Balgowan area, 29°21'S 30°05'E, 28.xii.1993; 1♀ 1♂ Garden Castle Nature Res., 29°45'S 29°15'E, 6–11.i.1988; 1♀ Krantzkloof Nature Reserve, 29°45'S 30°51'E, 1.ii.2000; 1♂ Krantzkloof Nat. Res., 2930DD, 8.xi.1984; 1♀ New Germany Nature Reserve, 29°49'S 30°53'E, 29.ii.1993; 1♀ Doreen Clarke Nature Reserve, 2930CB, 26.iii.1986; 1♀ Nhluzane Mountain, 29°33'S 29°56'E, 3.ii.1957; 1♂ Pietermaritzburg, 29°37'S 30°23'E, 25.xii.1982; 1♀ Ramsgate, 3030CD, 8–17.i.1982; 1♀ Kwanzimela Valley, 3.iii.1986; 2♂♂ 1? Dargle McLeod Farm, 4.xii.1991; *Mpumalanga:* 1♂ Potgietersrus, 24°15'S 28°58'E, 24–27.i.1978; 1♀ 1♂ Pretoriuskop, 25°09'S 31°15'E, 20–21.ii.1968; 1♀ Nelspruit, 25°27'S 30°58'E, xi.1959; *Western Cape Prov:* 1? Aliwal North, 30°42'S 26°42'E,.xii.1922; 1♀ 3♂♂ Vanrhynsdorp, 31°46'S 18°48'E, 3.xi.1991; 1♀ 1♂ Gifberg Pass, 3118DB, 16.xi.1986; 1♂ Somerset East, 32°43'S 25°34'E, x.1930; 1♀ Oudtshoorn, 33°35'S 22°12'E, 30.i.1980; 3♀♀ 1? Stellenbosch, 33°56'S 18°51'E, 8.i.1968, 27.i.1971, 18.iii.1981; 1♀ Moorreesburg, 33°08'S 18°40'E, 9.ii.1983; 3♀♀ 1♂ Louterwater, 3323DC, 13.xii.1979; 1♀ Bainskloof Pass, 33°35'S 19°08'E, 21–22.ii.1974; 1♂ Du Toit's Kloof Pass, 33°44'S 19°11'E, 23.i.1985; 2♀♀ 2♂♂ Knysna, 3423AA, 9–10.xii.1979; 1♂ 1? Kommetjie, 34°08'S 18°19'E, 13.xii.1989; 1♂ Muizenburg, 3418AB, 28.xi.1981; 1♀ Bokfontein [several such localities], 8.iii.1985. Depository: BMNH, NMSA, USNM, ZMHB.

Remarks: *Euscelidia brunnea* is the most widely distributed species in the species-group. Some variation is evident in the length of the lat pr aed, which are sometimes longer in specimens that have been examined from the Western Cape Province, South Africa. However, they show the characteristic features for this species, i.e. bluish-black sct and only few microtrichia on the wings.

Euscelidia cana sp. n. (*E. brunnea* species-group)

Figs 21G, 22

Etymology: Latin adjective *canus* = grey; refers to the distinct three grey pruinose stripes on the scutum.

Diagnosis: The species is distinguished from congeners by the two apruinose lateral bluish-black stripes on the sct and features of the ♂ terminalia (d aed shea open, lat pr aed long).

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brownish-black, setae white; oc tr white pruinose dorsally; occ silver pruinose, few white setae; *Antennae* - scp brown, white setae ventrally; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel brown.

Thorax: Black; ppro peg large, silver pruinose; sct bluish-black, yellow pruinose medially, lateral and posterior margins silver pruinose, 2 narrow median stripes, originating at anterior margin not reaching posterior margin, and 2 lateral stripes, not reaching anterior and posterior margins, apruinose, view short white setae on margins; macrosetae: white, 1 npl s, 1 spal s; mesopleura covered with dense white pruinosity, long white setae directing anteriorly on anepst and kepst; sctl silver pruinose, ds sctl s and sctl s very short, white; *Legs* - yellow to brown; pro fem yellow, meso and meta fem yellow proximally, remaining part brown, clubbed, club with brown stripe laterally, setae white; tib brown, pale yellow stripe not reaching tip on meta tib anteriorly; first tar pale yellow proximally, brown distad, remaining tar brown, black setae; emp minute; *Wings* - hyaline, but microtrichia scattered on remigium; ptero indistinguishable; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; T brown pruinose dorsally, grey pruinose laterally, T1 with long white setae laterally, white and brown setae on remaining T, S grey pruinose; ♂ *terminalia* Fig. 21G - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 lobes; d aed shea open, extending gonp, lat pr aed long; lat apod simple.

Type material - The ♂ holotype is labelled ‘South Africa Bloemfontein 20.xii.78 [20.xii.1978] J.G. Theron (locality and date handwritten) / HOLOTYPE *Euscelidia cana* sp. nov. det. T. Dikow 2001 (red label)’. The specimen is double mounted (minuten in rectangular piece of cardboard), is in very good condition (♂ terminalia attached to specimens pin in micro vial), and is deposited in the NMSA.

Type locality and distribution (Fig. 22): South Africa, Free State Province, Bloemfontein, 29°07'S 26°11'E. South Africa.

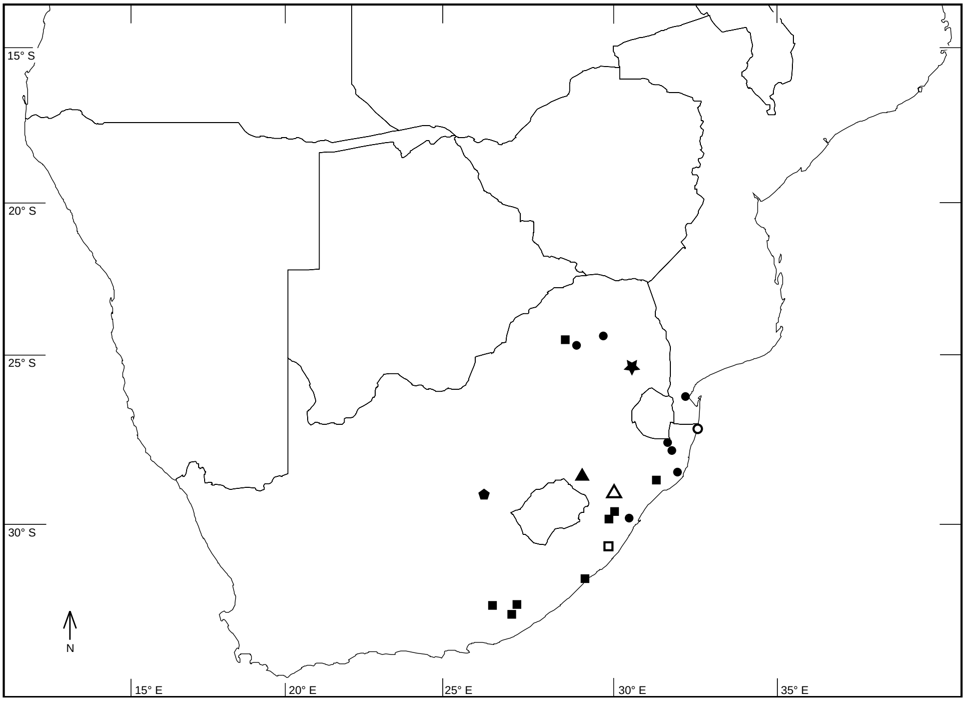

Fig. 22. Distribution. *Euscelidia cana* sp. n., pentagon; *E. natalensis* sp. n., circles; *E. notialis* sp. n., squares; *E. vallis* sp. n., triangles; *E. zumpti*, star.

Euscelidia capensis sp. n. (*E. brunnea* species-group)

Figs 19, 21H

Etymology: Refers to the distribution of the species in the Western Cape Province, South Africa.

Diagnosis: The species is distinguished from congeners by the many erect setae scattered on the sct and the densely arranged microtrichia on the wings.

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brownish-black, oc tr apruinose; occ silver pruinose, upper half only slightly silver pruinose, setae white; *Antennae* - scp brown, brown setae ventrally; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel brown.

Thorax: Black; ppro peg large, silver pruinose; sct bluish-black, yellow and brown pruinose, posterior margin silver pruinose, 2 narrow median stripes, originating at anterior margin, and 2 lateral spots, not reaching anterior and posterior margins, only slightly pruinose, long yellow and brown setae scattered on surface; macrosetae: black, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s long, brown; *Legs* - yellow to brown; pro and meso fem yellow, meta fem pale yellow proximally, remaining part yellow, clubbed, club with brown stripe laterally, setae white; pro and meso tib yellow, pale yellow stripe anteriorly, meta tib brown, pale yellow stripe not reaching tip anteriorly; first tar in proximal half pale yellow, brown distad, remaining tar brown, black setae; emp minute; *Wings* - densely covered with microtrichia; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; T brown pruinose, grey pruinose laterally, T1 with long brown setae laterally, white and brown setae on remaining T, S grey pruinose; ♂ *terminalia* Fig. 21H - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 lobes; d aed shea open, extending gonp, lat pr aed short, pointed; lat apod simple.

Type material - The ♂ holotype is labelled ‘Witzenberg Vall., S.W. Cape Prov. 3,000 ft. [900 m] 19.i.1921. / S. Africa. R.E. Turner. Brit. Mus. 1921-79. / HOLOTYPE *Euscelidia capensis* sp. nov. det. T. Dikow 2001 (red label)’. The specimen is double mounted (minuten in rectangular piece of plastic), is in relatively good condition (left meso and meta leg broken; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the BMNH.

Two ♀♀ paratypes and 1 of undeterminable gender have same labels as holotype except ‘PARATYPE *Euscelidia capensis* sp. nov. det. T. Dikow 2001 (yellow label)’. The specimens are double mounted (minuten in rectangular piece of plastic), are in relatively good condition (1♂ with legs and abdomen broken), and are deposited in the BMNH. Three ♀♀, four ♂♂ and two paratypes of undeterminable gender are labelled ‘Ceres, Cape Province. [date] / S. Africa. R.E. Turner Brit. Mus. [collection code] / PARATYPE *Euscelidia capensis* sp. nov. det. T. Dikow 2001 (yellow label)’. Specimens are double mounted (minuten in rectangular piece of plastic), are in relatively good condition (1♂ with broken head; 2?? with broken abdomen), and are deposited in the BMNH. Altitude, collection dates, and collection codes are supplied: 2♀♀ 1♂ xi.1920, 1920-497; 1♀ 1♂ 1,500 ft. [500 m], i.1921, 1921-78; 1♀ ii.1921, 1921-115; 1?.i.1925, 1925-79; 2♂♂ ii.1925, 1925-116.

Type locality and distribution (Fig. 19): South Africa, Western Cape, Witzenberg Valley, 33°20'S 19°30'E. South Africa.

Material examined: SOUTH AFRICA: *Western Cape Prov:* 1? Ceres [several such localities], i.1925 [specimen in poor condition]. Depository: BMNH.

Euscelidia natalensis sp. n. (*E. brunnea* species-group)

Figs 5A–C, 7B, 21A–E, 22

Etymology: Refers to the distribution of this species that is centred in south-eastern South Africa in the province KwaZulu-Natal.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose, black sct, the two narrow median grey pruinose stripes on the sct, and the densely arranged microtrichia on the wings.

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp dark brown, setae white; oc tr apruinose; occ silver pruinose, black setae medially and white setae laterally; *Antennae* - scp brown, white setae ventrally, white pruinose; ped brown, black setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel hyaline.

Thorax: Black; ppro peg small, distinct, silver pruinose; sct black, sometimes with antero-lateral red spots, brown pruinose, margins silver pruinose, sometimes pruinosity restricted to margins, 2 narrow median stripes, not reaching posterior margin, and 2 lateral stripes, not reaching anterior and posterior margins, apruinose, yellow and brown setae medially, white setae on lateral margins, dc setae well-developed; macrosetae: 1 white npl s, 1 black spal s; sctl silver pruinose, ds sctl s and sctl s long, brown; *Legs* - yellow to brown; fem proximally yellow, brown distad, setae white, meta fem clubbed, club with short white setae; tib brown, pale yellow stripe not reaching tip anteriorly; first tar yellow, brown distad, remaining tar brown, setae black; emp minute; *Wings* - densely covered with microtrichia; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; T predominantly brown pruinose, anterior and posterior margins grey pruinose, T1 with long brown setae, T2 in proximal third with few white setae laterally, remaining T with short yellow and brown setae, S grey pruinose; ♂ *terminalia* Figs 21A–E - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 lobes; d aed shea open, extending gonp, lat pr aed long, rounded; lat apod simple.

Type material - The ♂ holotype is labelled 'SOUTH AFRICA: Natal Kosi Bay Nat. Reserve 2632DD 30.xi.–2.xii.82 [30.xi.–2.xii.1982] Londt, Barraclough & Stuckenberg Forest & open woodland areas / HOLOTYPE *Euscelidia natalensis* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is double mounted (minuten in block of foam), is in excellent condition, and is deposited in the NMSA.
The 6♀ ♀ 5♂♂ paratypes have same labels as holotype except 'PARATYPE *Euscelidia natalensis* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimens are double mounted (minuten in block of foam), are in good to very good condition, and are deposited in the NMSA.

Type locality and distribution (Fig. 22): South Africa, KwaZulu-Natal, Kosi Bay Nature Reserve, 26°52'S 32°52'E. Mozambique, South Africa.

Material examined: MOZAMBIQUE: 3♀♀ 1♂ 2?? Maputo, 25°57'S 32°34'E, ix.–xii. 1913, i.–iii., iv.–vii.1914; SOUTH AFRICA: *KwaZulu-Natal:* 1♀ Kosi Bay Estuary, 2632DD, 16–19.iii.1982; 1♀ 1? Mkuzi Game Reserve, 27°38'S 32°14'E, 12.i.1994, 14.iii.1995; 2♀♀ 5♂♂ St. Lucia Nature Reserve, 28°20'S 32°25'E, 7.x.1983, 21.x.1984; 2♀♀ Dukuduku Forest Reserve, 28°23'S 32°20'E, 7–8.iv.1960, 25.iv.1988; 2♀♀ 1♂ Jozini, 2732AC, 28.xi.1971; 3♀♀ 1♂ Krantzkloof Nature Reserve, 2930DD, 8.xi.1984; *Northern Prov:* 1♀ 1♂ Uitkyk road, 2429AA, 28.i.1978; 1♂ Blyde river canyon, 2430DB, 26–27.ii.1980. Depository: BMNH, NMSA.

Euscelidia notialis sp. n. (*E. brunnea* species-group)

Figs 20F–K, 22

Etymology: Latin adjective *notialis* = southern; refers to the apparent distribution in South Africa.

Diagnosis: The species is distinguished from congeners by the brown and grey pruinose sct, the densely arranged microtrichia on the wings, and features of the ♂ terminalia (d aed shea open and with long lat pr aed) (Figs 20F–K).

Description: *Head:* Black; fc yellow pruinose, fc gib indistinct, mystax white (sometimes yellow), many macrosetae; prob and plp dark brown, setae white; oc tr silver pruinose dorsally; occ silver pruinose, black setae medially and white setae laterally; *Antennae* - scp brown, white setae ventrally, white pruinose; ped brown, black setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel hyaline.

Thorax: Black; ppro peg large, silver pruinose; sct predominantly brown pruinose, margins grey pruinose, sometimes 2 narrow median stripes, not reaching posterior margin, and 2 lateral stripes, not reaching anterior and posterior margins, apruinose, few white and yellow setae on margins; macrosetae: black, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s short, white; *Legs* - yellow to brown; pro and meso fem yellow, meta fem yellow proximally, brown distad, clubbed, club with short white setae; pro and meso tib yellow, pale yellow stripe anteriorly, meta tib yellow proximally, brown distad, pale yellow stripe not reaching tip anteriorly; first tar yellow, brown distad, remaining tar brown, black setae; emp minute; *Wings* - densely covered with microtrichia, cell br with few microtrichia; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; T predominantly brown pruinose, anterior, lateral, and posterior margins grey pruinose, T1 with long brown setae, T2 in proximal third with few white setae laterally, remaining T with short yellow and brown setae, S grey pruinose; ♂ *terminalia* Figs 20F–K - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 long lobes; d aed shea open, gonp proximally, lat pr long; lat apod simple.

Type material - The ♂ holotype is labelled 'Oribi Gorge Reserve, Umzimkulwana Valley, Natal, South Africa. B. & P. Stuckenberg 21–28 November 1960 / 77 / HOLOTYPE *Euscelidia notialis* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is double mounted (minuten in block of foam), is in relatively good condition (abdomen broken, but attached to foam block; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the NMSA.

2♀♀ paratypes have same labels as holotype except 'PARATYPE *Euscelidia notialis* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimens are double mounted (minuten in block of foam), are in very good condition, and are deposited in the NMSA. 2♀♀ 1♂ paratypes are labelled 'Gillitts Pinetown district Natal, S. Africa B. & P. Stuckenberg 28.XII.1961 (date on backside) / From grassland / PARATYPE *Euscelidia notialis* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimens are double mounted (minuten in block of foam), ♀♀ are in very good condition and ♂ is in relatively good condition (antennae, tarsi, and meta legs broken; terminalia attached to specimens pin in micro vial), and are deposited in the NMSA. 1♀ paratype is labelled 'Gillitts Pinetown district Natal, S. Africa B. & P. Stuckenberg 11.I.62 (date handwritten) / PARATYPE *Euscelidia notialis* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is double mounted (minuten in block of foam), is in very good condition, and is deposited in the NMSA. 1♂ 1? paratype are labelled 'Port St. Johns South Africa B. & P. Stuckenberg 20–25 Nov. 1961 / *Euscelidia zumpti* Janssens det. H. Oldroyd 1973 (handwritten except for 'det. H. Oldroyd 19'; only ♂ specimen with this label) / PARATYPE *Euscelidia notialis* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimens are double mounted (minuten in block of foam), are in good to very good condition (1? pped, right meso leg, and abdomen broken; ♂ terminalia attached to specimens pin in micro vial), and are deposited in the NMSA. 1♂ paratype is labelled 'P.M.B. [Pietermaritzburg] NATAL 25.XII.82 SHORT GRASS ABOVE WYLIE PARK (handwritten) / PARATYPE *Euscelidia notialis* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is double mounted (attached to triangular piece of cardboard), is in good condition (right pped and meta legs broken (left meta leg attached to piece of cardboard), ♂ terminalia attached to specimens pin in micro vial), and is deposited in the NMSA. 1♂ paratype is labelled 'SOUTH AFRICA 2429AC Transvaal 10 km SE Potgietersrus on rd to Zebediela 24–7.I 1978 [24–27.i.1978] J.G.H. Londt Bushveld ex malaise / PARATYPE *Euscelidia notialis* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is double mounted (minuten in block of foam), is in very good condition (♂ terminalia attached to specimens pin in micro vial), and is deposited in the NMSA.

Type locality and distribution (Fig. 22): South Africa, KwaZulu-Natal, Oribi Gorge Nature Reserve, 30°42'S 30°15'E. South Africa.

Material examined: SOUTH AFRICA: *Eastern Cape Prov:* 2♀♀ 3♂♂ 1? Pirie Dam, 32°46'S 27°12'E, ii.1944; 12♀♀ 2♂♂ Katberg, 32°31'S 26°37'E, 1–13.xi., xii.1932, 1–15+15–30.i., 1–10.ii.1933; 1♀ 1♂ Stutterheim, 32°33'S 27°24'E, 21.i.1984; 1 ♂ Port St. Johns, 6-8.iii.1949; *KwaZulu-Natal:* 1♂ Ntambanana area, 28°35'S 31°45'E, 8.i.1986. Depository: BMNH, CUIC, NMSA.

Euscelidia ochricornis (Loew, 1858), **comb. n.** (*E. brunnea* species-group)

Figs 18, 19, 23

Leptogaster ochricornis Loew, 1858: 352; 1860: 101; Hull 1962: 300; Oldroyd 1980: 358.

Diagnosis: The species is distinguished from congeners by the short appressed grey and brown pruinosity on the sct with two narrow median apruinose stripes and three lateral apruinose spots, the few microtrichia on the wings, and features of the ♂ terminalia (d aed shea open, extending gonp).

Redescription: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; oc tr white pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp light brown, setae white; ped yellow, white setae ventrally, brown setae dorsally, white pruinose; pped yellow, white pruinose; apsel yellow; *Thorax:* Orange to black; sct predominantly orange, black on apruinose areas, predominantly silver pruinose, brown pruinose medially, 2 median narrow longitudinal stripes, not reaching posterior margin, and 2 presut lateral spots and 2 psut lateral spots apruinose, macrosetae: white, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s long, white; *Legs* - yellow to light brown; pro and meso fem light brown, meta fem pale yellow proximally, light brown, clubbed, brown stripes laterally on club; tib brown, pale yellow stripe, not reaching tip on meta tib, anteriorly; emp distinct, very short; *Wings* - hyaline, few microtrichia scattered on remigium and margins; ptero indistinct; cell d terminating in 2 veins; hlt light brown; *Abdomen:* Black; T sometimes proximally orange, T brown pruinose medially, grey pruinose on anterior and posterior margins, T1 with black setae, T2 in proximal half with white setae laterally, S predominantly grey pruinose, apruinose anteriorly; ♂ *terminalia* Figs 18, 23 - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 lobes; d aed shea open, extending gonp, lat pr aed short; lat apod simple.

Type material - The ♀ holotype is labelled ‘261 / 92. / 82 52 (red label) / *Leptogaster ochricornis* / HOLOTYPE *Leptogaster ochricornis* Loew, 1858 by T. Dikow 2001 (red label)’. The specimen is directly mounted, is in good condition (left meta leg and abdomen (attached to label) broken), and is deposited in the NHRS.

Type locality and distribution (Fig. 19): South Africa, ‘Caffraria’, no co-ordinates available. The type specimens were collected by Wahlberg, who travelled in south-eastern South Africa (Usher 1972). South Africa, Swaziland.

Material examined: SOUTH AFRICA: *KwaZulu-Natal:* 1♀ Ndumu Reserve, 26°55'S 32°15'E, 1–10.xii.1963; 2♀♀ 1♂ False Bay Park, 27°58'S 32°22'E, 23–24.iv.1988; 1♂ Weenen, 28°51'S 30°04'E, iv.1924; *Northern Prov:* 1♀ Gravelotte, 23°56'S 30°37'E, 17.xi.1978; 1♀ Silkaatsnek, 2527Db, 1972; SWAZILAND: 3♀♀ 2♂♂ Ngogolo, 26°24'S 31°36'E, 24.iv.1991; 1♀ Mbuluzi Nature Reserve, 26°08'S 32°00'E, 25.iv.1991. Depository: BMNH, NMSA.

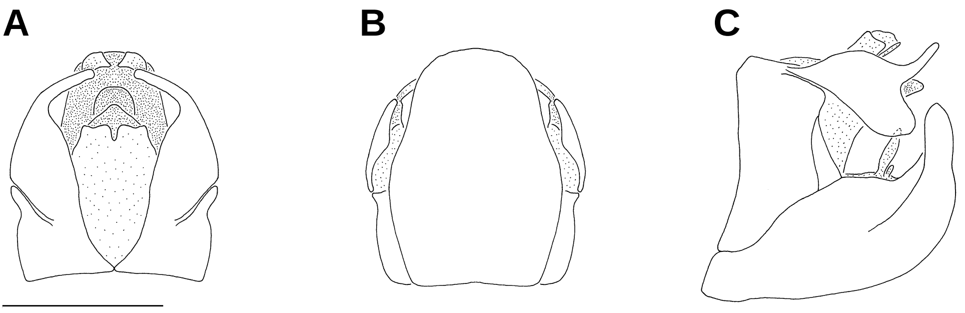

Fig. 23. ♂ terminalia. *Euscelidia ochricornis*. A. Dorsal. B. Ventral. C. Lateral. Scale line = 1 mm. Aedeagus in Fig. 18.

Euscelidia vallis sp. n. (*E. brunnea* species-group)

Figs 21I, 22

Etymology: Latin noun *vallis* = valley; refers to the Mhlopeni river valley, in which the type locality lies.

Diagnosis: The species is distinguished from congeners by the predominantly brown pruinose sct, the densely arranged microtrichia on the wings, and features of the ♂ terminalia (d aed shea open, extending gonp, lat pr rounded distally).

Description: *Head:* Black; fc yellow pruinose, silver pruinose around mystax, fc gib indistinct, mystax white, many macrosetae; prob and plp brownish-black, setae white; oc tr apruinose; occ silver pruinose (dorsal part less pruinose with some apruinose spots), setae white and yellowish; *Antennae* - scp brown, white setae ventrally; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel brown.

Thorax: Black; ppro peg large, silver pruinose; sct predominantly brown pruinose, lateral and posterior margins silver pruinose, 2 lateral stripes, not reaching anterior and posterior margins, slightly apruinose, few short white setae on margins; macrosetae: 1 white npl s, 1 black spal s, 1 black pal; sctl silver pruinose, ds sctl s and sctl s short, brown; *Legs* - yellow to brown; pro and meso fem yellow, meta fem pale yellow proximally, remaining part brown, clubbed, club with brown stripe laterally, setae white; pro tib yellow, meso and meta tib brown, pale yellow stripe not reaching tip on meta tib anteriorly; first tar in proximal 2/3 pale yellow, brown distad, remaining tar brown, setae black; emp minute; *Wings* - densely covered with microtrichia, cell br with only few microtrichia; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; T brown pruinose dorsally, grey pruinose laterally, T1 with long white and brown setae laterally, white and brown setae on remaining T, S grey pruinose; ♂ *terminalia* Fig. 21I - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 lobes; d aed shea open, extending gonp, lat pr aed rounded; lat apod simple.

Type material - The ♂ holotype is labelled ‘SOUTH AFRICA; Natal Mhlopeni Nature Res. 15 km SE Muden 2930AB Coll. J.G.H. Londt Date: 4.ii.1984 (date handwritten) / HOLOTYPE *Euscelidia vallis* sp. nov. det. T. Dikow 2001 (red label)’. The specimen is double mounted (minuten in block of foam), is in excellent condition, and is deposited in the NMSA.

A ♂ paratype has same labels as holotype except ‘PARATYPE *Euscelidia vallis* sp. nov. det. T. Dikow 2001 (yellow label)’. The specimen is double mounted (minuten in block of foam), is in excellent condition (♂ terminalia attached to specimens pin in micro vial), and is deposited in the NMSA.

Type locality and distribution (Fig. 22): South Africa, KwaZulu-Natal, Mhlopeni Nature Reserve, 29°00'S 30°25'E. South Africa.

Material examined: SOUTH AFRICA: *KwaZulu-Natal:* 1♂ Van Reenen, 28°22'S 29°23'E, 1–22.i.1927. Depository: BMNH.

Euscelidia cacula sp. n.

Figs 17E–H, 46

Etymology: Noun in apposition that refers to the type locality Cacula, Angola.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose sct, many yellow setae arranged laterally on sct, and the densely arranged microtrichia on the wings.

Description: *Head:* Black; fc yellow pruinose, fc gib indistinct, mystax yellow, many macrosetae; prob and plp brownish-black, setae white; oc tr yellow pruinose dorsally; occ silver pruinose, setae yellow, white setae ventrally; *Antennae* - scp dark brown, yellow setae ventrally, white pruinose; ped dark brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose proximally and ventrally; apsel hyaline.

Thorax: Black; ppro peg large, yellow pruinose; sct apruinose, margins yellow pruinose, yellow setae on margins, few short dc setae may be present, macrosetae: 1 white npl s, 1 black spal s; sctl white pruinose, ds sctl s and sctl s long, yellow; *Legs* - yellow to brown; pro fem light brown, meso fem light brown, brown dorsally, meta fem yellow proximally, remaining part light brown to brown dorsally, light brown ventrally, slightly clubbed, short white setae on club; pro tib light brown, yellow stripe anteriorly, meso and meta tib brown, yellow stripe not reaching tip on meta tib anteriorly; first tar yellow proximally, brown distad, black setae; emp about a third of length of clw; *Wings* - densely covered with microtrichia; ptero indistinct, brown; cell d terminating in 2 veins; hlt orange.

Abdomen: Black; T grey pruinose, distal T more extensively brown pruinose, T1 with long yellow setae, T2 in proximal 2/3 with yellow setae laterally, remaining T with short white and yellow setae, S grey pruinose; ♂ *terminalia* Figs 17E–H - sur pointed distally, lobe ventrally; hypd ventral margin straight; d aed shea tubular, terminating in a dorsad directed structure; lat apod bifurcated.

Type material - The ♂ holotype is labelled 'ANGOLA (A20) 10 mls [16 km], NE. Cacula 5.iii.1972 ('ANGOLA (A20)' blue underlined) / Southern Africa Exp. B.M. 1972-1 / *Euscelidia* ? sp. nov. det. H. Oldroyd 1973 (handwritten except for 'det. H. Oldroyd 19') / HOLOTYPE *Euscelidia cacula* sp. nov. T. Dikow 2001 (red label)'. The specimen is double mounted (minuten in block of foam), is in very good condition (right pped broken; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the BMNH.

A paratype of undeterminable gender with the same locality data and 'PARATYPE *Euscelidia cacula* sp. nov. T. Dikow 2001 (yellow label)' is double mounted (minuten in block of foam), is in poor condition (antennae, left meta leg, wings, and abdomen broken), and is deposited in the BMNH. A ♀ paratype is labelled 'ANGOLA (A17) 15 mls [24 km]. N. Sa da Bandeira, c. 6500 ft. [1950 m] 3.iii.1972 ('ANGOLA (A17)' blue underlined) / Southern Africa Exp. B.M. 1972-1 / PARATYPE *Euscelidia cacula* sp. nov. T. Dikow 2001 (yellow label)'. The specimen is double mounted (minuten in block of foam), is in very good condition (pro and meso tarsi broken), and is deposited in the BMNH. Another ♀ paratype is labelled 'ANGOLA (A22) Nova Lisboa 5–7.iii.1972 ('ANGOLA (A22)' blue underlined) / Southern Africa Exp. B.M. 1972-1 / PARATYPE *Euscelidia cacula* sp. nov. T. Dikow 2001 (yellow label)’. The specimen is double mounted (minuten in block of foam), is in excellent condition, and is deposited in the BMNH.

Type locality and distribution (Fig. 46): Angola, Cacula, 14°29'S 14°06'E. Angola.

Euscelidia castanea Janssens, 1954

Fig. 50

Euscelidia castanea Janssens, 1954*a*: 124; Oldroyd 1980: 356.

Diagnosis: The species is distinguished, together with *nenemusha* and *schoutedeni*, from congeners by the overall brown colour, the predominantly apruinose sct, and the apruinose T8 in the ♀♀.

Redescription: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, 6 macrosetae; oc tr white pruinose dorsally; occ silver pruinose, few white setae; *Antennae* - scp and ped brown, setae brown; pped brown, white pruinose; apsel brown; *Thorax:* Brown; sct brown, predominantly apruinose, anterior, lateral, and posterior margins silver pruinose, few white setae on pruinose area, brown setae on posterior margin, macrosetae: black, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl long, brown; *Legs* - yellow and light brown; fem yellow proximally, brown distad; tib light brown, yellow stripe not reaching tip anteriorly; emp short; *Wings* - hyaline, brown stained; ptero distinct, brown; cell d terminating in 2 veins; hlt brown; *Abdomen:* Brown; T predominantly apruinose, lateral and posterior margins white pruinose, T1 with black setae, T2 with white long setae laterally, remaining T with short white setae, ♀ T8 apruinose; ♂ *terminalia* - ♂♂ specimens unknown.

Type material - The ♀ holotype is labelled ‘HOLOTYPE (red label with black submarginal border) / TYPE (red label with red border around ‘TYPE’) / Congo belge: P. N. U. [Parc National de l’Upemba] Lusinga (1.760 m.) 1–8-XII-1947 Mis. G. F. de Witte. 1123a / E. Janssens det., 1952 *Euscelidia castanea* Em. Janssens (handwritten except for ‘E. Janssens det., 19’)’. The specimen is double mounted (minuten in block of foam), is in good condition (met legs broken and right wing damaged), and is deposited in the MRAC.

Type locality and distribution (Fig. 50): DR Congo, Upemba National Park, Lusinga, 8°55'S 27°11'E. DR Congo, Uganda.

Material examined: DR CONGO: 1♀ Virunga National Park, Mutsora, 0°19'N 29°44'E, 13–18.ii.1953; 1♀ Upemba National Park, Lusinga, 8°55'S 27°11'E, 1–8.xii.1947; UGANDA: 1♀ Kilembe, 0°12'N 29°59'E, xii.1934–i.1935. Depository: BMNH, ISNB, MRAC.

Remarks: The species is only known from a few female specimens. It is related to *nenemusha* and *schoutedeni*, which are also only known from females. It is necessary to examine male specimens from the type localities of all three species to discuss a probable synonymy.

Euscelidia cobice sp. n.

Figs 24A–D, 36

Etymology: The specific name ‘*cobice*’ is a noun in apposition that refers to the Copenhagen Biosystematics Centre (COBICE) to acknowledge the generous funding by the European Commission ‘Improving Human Potential’ programme ‘Transnational Access to Major Research Infrastructures’ that made my research at this institution possible.

Diagnosis: The species is distinguished from congeners by the predominantly yellow pruinose sct, the densely arranged microtrichia on the wings, and features of the ♂ terminalia (sur with large ventral lobe, d aed shea tubular).

Description: *Head:* Black; fc silver pruinose, fc gib distinct, mystax white, many macrosetae; prob and plp brownish-black, setae white; oc tr apruinose; occ silver and yellowish pruinose, setae yellow; *Antennae* - scp brown, brown setae ventrally; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel brown.

Thorax: Black; ppro peg small, distinct, silver pruinose; sct bluish-black, predominantly yellow pruinose, median stripe and 2 lateral spots may be distinctly apruinose, sometimes fused to form 1 large apruinose spot, yellow setae scattered on surface; macrosetae: black, 1 npl s, 1 spal s; sctl yellow pruinose, ds sctl s and sctl s long, yellow; *Legs* - yellow to brown; pro fem yellow, meso fem yellow proximally, remaining part brown, meta fem in proximal 1/3 pale yellow, clubbed, club in proximal half brown, distal half yellow, setae white, tib yellow proximally, remaining part brown, pale yellow stripe not reaching tip on meta tib anteriorly; first tar in proximal half yellow, brown in distal half, remaining tar brown, black setae; emp short, about a quarter of length of clw; *Wings* - hyaline, but microtrichia evenly scattered on remigium, brown stained; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Brown, sometimes anterior margins of T orange; T predominantly brown pruinose, anterior, lateral, and posterior margins grey pruinose, T2 in proximal 1/3 with apruinose spot, T1 with long white and black setae laterally, T2 in proximal half with white setae laterally, remaining T with white and brown setae, S grey pruinose; ♂ *terminalia* Figs 24A–D - sur pointed distally, large lobe ventrally; hypd ventral margin straight; d aed shea tubular, medium length; lat apod bifurcated.

Type material - The ♂ holotype is labelled ‘S. India: Karnataka. Mudigere area, c. 900 m 2–10.xi.1977 Zool. Mus. Copenhagen Exp. / HOLOTYPE *Euscelidia cobice* sp. nov. det. T. Dikow 2001 (red label)’. The specimen is directly mounted, is in very good condition (right meta leg broken), and is deposited in the ZMUC.

7♀♀ 1♂ paratypes are labelled ‘S. India: Karnataka. Mudigere area, c. 900 m 2–10.xi.1977 Zool. Mus. Copenhagen Exp. / PARATYPE *Euscelidia cobice* sp. nov. det. T. Dikow 2001 (yellow label)’. The specimens are directly mounted, are in very good to excellent condition, and are deposited in the ZMUC.

Type locality and distribution (Fig. 36): India, Karnataka Province, Mudigere, 13°07'N 75°37'E. India.

Material examined: INDIA: 2♀♀ Kodagu, 12°25'N 75°45'E, 24.x.–16.xi.1915. Depository: BMNH.

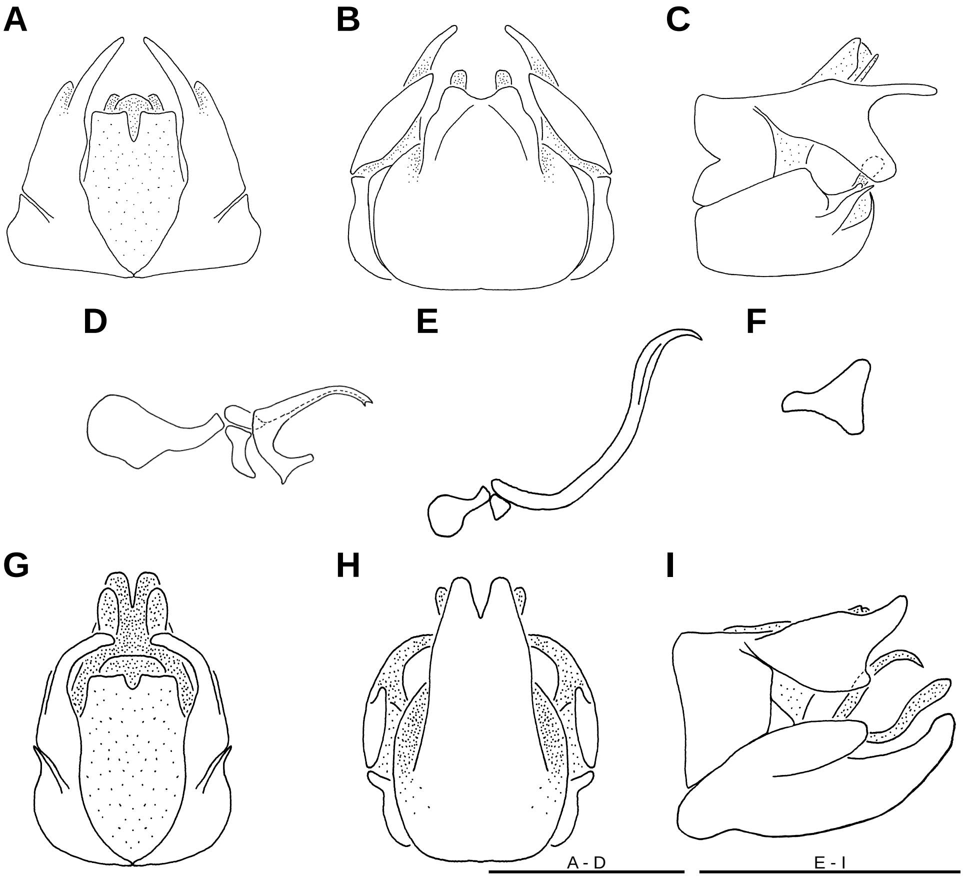

Fig. 24. ♂ terminalia. A–D. *Euscelidia cobice* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. E–I. *E. crena* sp. n. E. Aedeagus lateral. F. Lateral apodeme posterior. G. Dorsal. H. Ventral. I. Lateral. Scale lines = 1 mm.

Euscelidia crena sp. n.

Figs 24E–I, 29

Etymology: Latin noun *crena* = rounded projection; refers to the well-developed facial swelling.

Diagnosis: The species is distinguished from congeners by the distinct facial swelling, three apruinose spots on the lateral sct, and features of the ♂ terminalia (gonst large, lat apod triangular, d aed shea tubular).

Description: *Head:* Black; fc silver pruinose, fc gib distinct, mystax white, 12 macrosetae; prob and plp brownish-black, setae white; oc tr white pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp brown, white setae ventrally; ped brown, brown setae ventrally and dorsally, white pruinose; pped light brown proximally, brown distad, white pruinose; apsel hyaline.

Thorax: Dark brown; ppro peg small, distinct, silver pruinose; sct black (♀ paratype with orange anterior and lateral margins), yellow pruinose medially, margins silver pruinose, 2 antero-lateral spots apruinose, 2 lateral spots anterior and posterior to trn sut apruinose, but not as distinct as antero-lateral spots, few yellow or white setae on margins; macrosetae: white, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s short, white; *Legs* - yellow to brown; pro and meso fem yellow, meta fem pale yellow in proximal half, clubbed, club light brown, setae white; pro and meso tib light brown, pale yellow stripe anteriorly, meta tib brown, pale yellow stripe in proximal half anteriorly; tar light brown to brown, black setae; emp long, about a quarter of length of clw; *Wings* - hyaline, few microtrichia scattered on remigium and distal margin; ptero distinct, light brown; cell d terminating in 3 veins; hlt light brown.

Abdomen: Dark brown; T predominantly brown pruinose, anterior, lateral, and posterior margins grey pruinose, T1 with long white setae laterally, T2 in proximal third with few white setae laterally, remaining T with white and yellow setae, S grey pruinose; ♂ *terminalia* Figs 24E–I - sur pointed distally, lobe ventrally; hypd ventral margin straight; gonst large; d aed shea tubular; aed apod small; lat apod triangular.

Type material - The ♂ holotype is labelled ‘KENYA: Machakos #88 17 km SE Sultan Hamud 02°04'S:37°28'E 1140 m Date: 30.xi.1992 J Londt & A Whittington Grassland & road verges / HOLOTYPE *Euscelidia crena* sp. nov. det. T. Dikow 2001 (red label)’. The specimen is double mounted (minuten in block of foam), is in excellent condition (♂ terminalia attached to specimens pin in micro vial), and is deposited in the NMSA.

The ♀ paratype has same labels as holotype except ‘PARATYPE *Euscelidia crena* sp. nov. det. T. Dikow 2001 (yellow label)’. The specimen is double mounted (minuten in block of foam), is in excellent condition, and is deposited in the NMSA.

Type locality and distribution (Fig. 29): Kenya, Sultan Hamud (17 km SE), 2°04'S 37°28'E. Kenya.

Euscelidia datis species-group

Diagnosis of species: All representatives (*artaphernes*, *datis*, *rapax*, and two new species (*lata*, *milva*)) of this group are distinguished from congeners by the generally large size, darkened wings, the presence of yellow setae on the sct, erect setae on the clubbed meta fem (Fig. 25), and characters of the ♂ terminalia (greatly enlarged, sharply inwards pointing tip of sur, very long aed (extending ♂ terminalia), and bifurcated lat apod). (Note: The use of this species-group does not intend any ranking of these species as a subgenus or even a genus.)

Remarks: Only ♂♂ specimens of this group can be identified properly. The many ♀♀ specimens examined are listed under *datis*. The development of setae ventrad of the antennae in *artaphernes* is generally good for identifying ♀♀ of this species. However, the character is not consistently found in all ♂♂ specimens and therefore should be used tentatively. Some species of this group are sometimes found sympatrically, e.g. *artaphernes* and *datis* in Albertville (DR Congo) and Bossoum (Cameroon) and *datis* and *milva* in Fort Crampel (Central African Republic). It is necessary to examine more ♂♂ specimens to comment on the distribution of every species more accurately (see distribution map in Fig. 26).

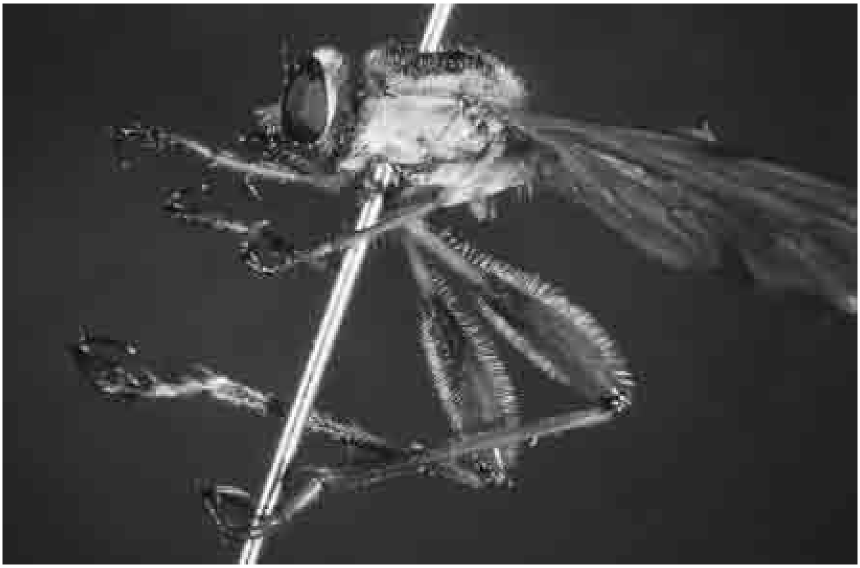

Fig. 25. *Euscelidia milva* sp. n. Lateral aspect of specimen.

Euscelidia artaphernes (Speiser, 1910) *(E. datis* species-group)

Figs 26, 27A–C, G

Leptogaster artaphernes Speiser, 1910: 83.
Euscelidia artaphernes, Oldroyd 1939: 28; Lindner 1955: 28; Oldroyd 1980: 356.

Redescription: *Head:* Black; fc yellow pruinose, often long yellow setae originating at antennal base directing ventrally, fc gib distinct; mystax yellow, many macrosetae, nearly as long as prob; oc tr apruinose; occ silver pruinose, setae yellow; *Antennae* - scp brown, setae yellow; ped light brown, white pruinose, setae yellow and brown; pped light brown proximally, brown distad, white pruinose posteriorly; apsel hyaline; *Thorax:* Black; sct predominantly black, antero-laterally orange; margins silver or yellow pruinose, yellow setae scattered on surface, setae always directing to the centre; sctl white pruinose, ds sctl s and sctl s long, yellow; *Legs* - orange to brown; fem light brown, meta fem pale yellow proximally, brown medially, orange distally, clubbed, club densely covered with short, erect yellow setae; pro and meso tib light brown, yellow stripe anteriorly, meta tib orange proximally, brown distad, yellow stripe not reaching tip anteriorly; emp distinct, very short; *Wings* - densely covered with microtrichia, brown coloured; ptero indistinct, brown; cell d terminating in 2 veins; hlt light brown; *Abdomen:* Brown to dark brown; T orange on anterior and posterior margins, grey pruinose, setae yellow, T1 with long yellow setae, T2 in proximal 2/3 with yellow setae laterally; ♂ *terminalia* Figs 27A–C, G - sur bent inwards distally; hypd with membranous area ventrally; d aed shea long, tip Fig. 27G, lat apod bifurcated.

Type material - The ♂ lectotype, here designated to preserve stability and make more universal the use of this name, is labelled ‘Kilimandjaro *Sjöstedt.* 1905–6 / Kibonoto 1000–1300 m / 29 april (‘29’ handwritten) / Type! *Leptogaster artaphernes* m P. Speiser det. (handwritten except for ‘P. Speiser det.’) / LECTOTYPE *Leptogaster artaphernes*

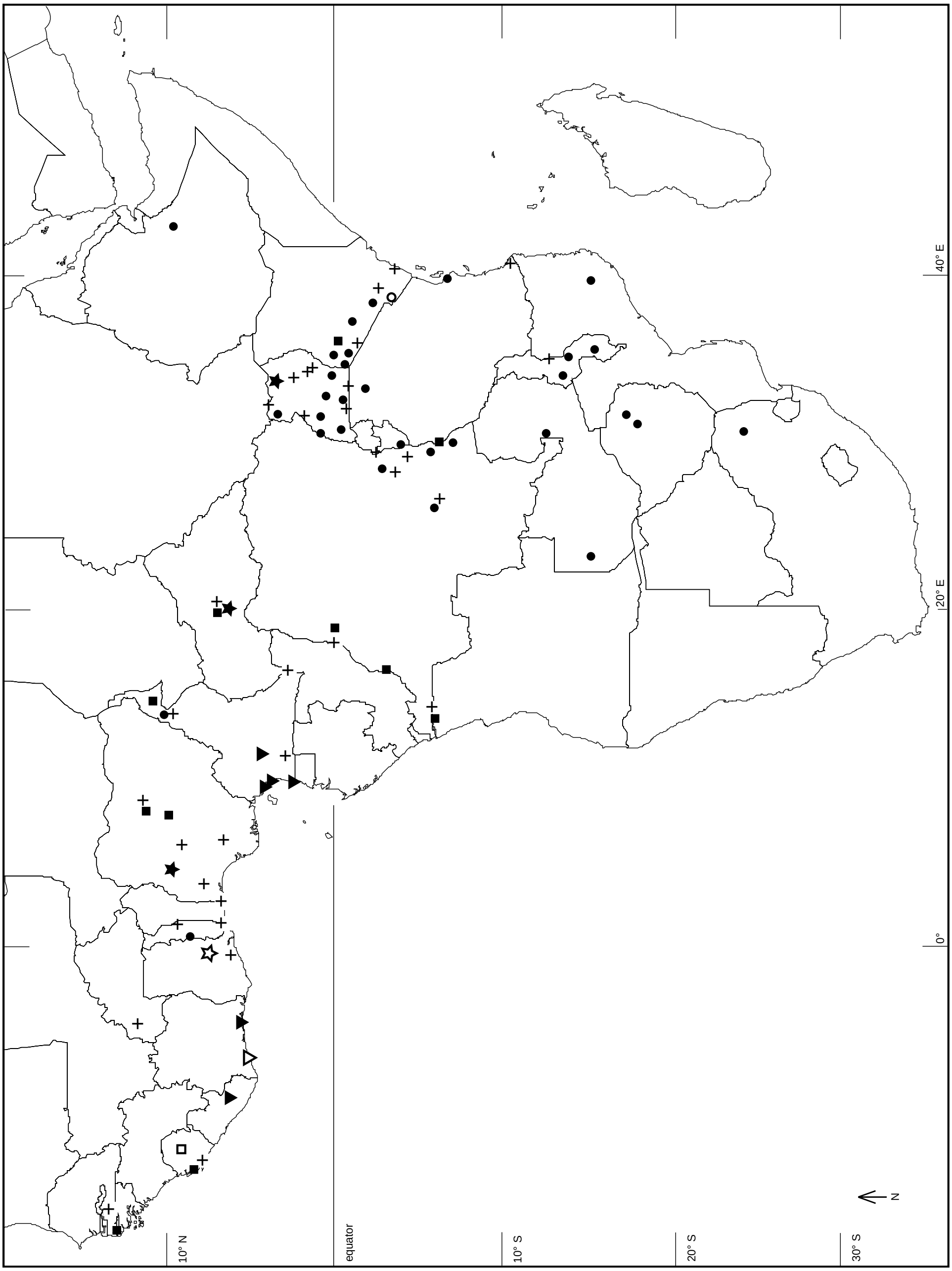
40° E
20° E
0°
10° N
equator
10° S
20° S
30° S
N

Fig. 26. Distribution. *E. artaphernes*, circles; *E. datis*, squares; *E. lata* sp. n., triangles; *E. milva* sp. n., stars; ♀ ♀ of species-group, plus sign.

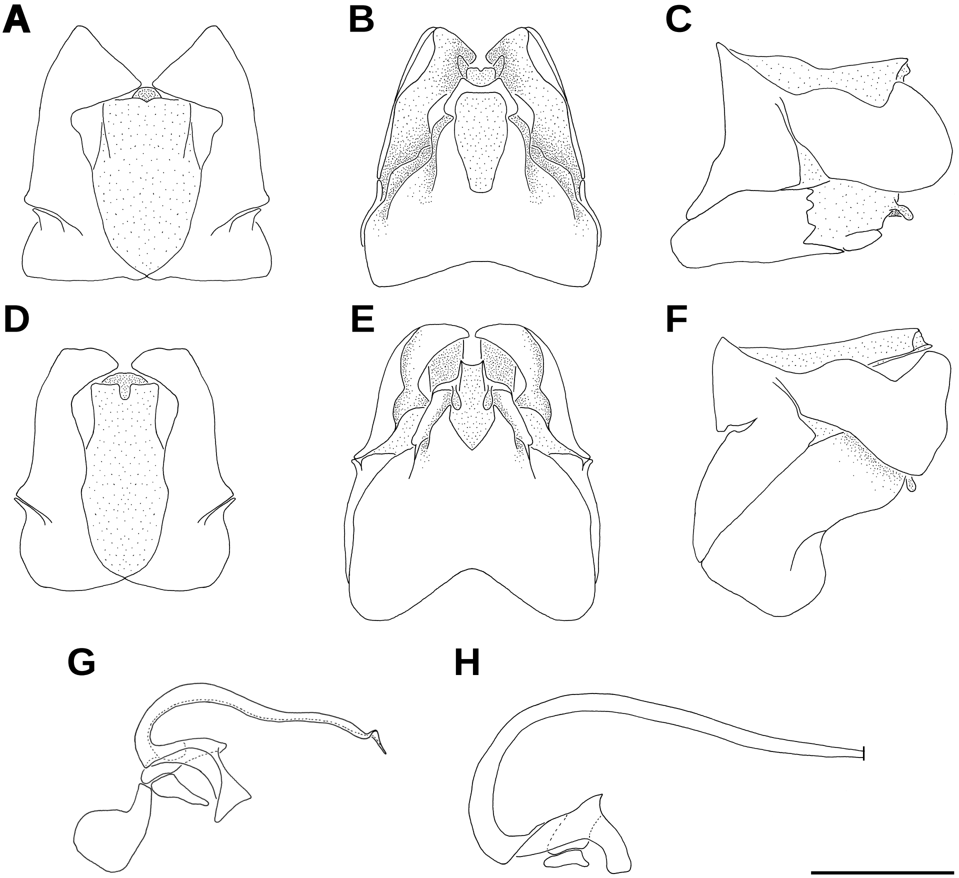

Fig. 27. ♂ terminalia. A–C, G. *Euscelidia artaphernes*. A. Dorsal. B. Ventral. C. Lateral. G. Aedeagus lateral. D–F, H. *E. rapax*. D. Dorsal. E. Ventral. F. Lateral. H. Aedeagus lateral (tip broken and shape unknown; aed apod not illustrated). Scale line = 1 mm.

Speiser, 1910 by T. Dikow 2001 (red label)'. The specimen is directly mounted, is in good condition (sct cracked), and is deposited in the NHRS.

The ♀ paralectotype is labelled 'Kilimandjaro *Sjöstedt.* 1905–6 / Kibonoto 1000–1300 m / 4 dec. [4 December] ('4' handwritten) / *Leptogaster artaphernes* m P. Speiser det. (handwritten except for 'P. Speiser det.') / PARALECTOTYPE *Leptogaster artaphernes* Speiser, 1910 by T. Dikow 2001 (yellow label)'. The specimen is directly mounted, is in poor condition (right pped, left meso leg, right meta leg broken; sct cracked; left meta leg attached to the body with glue), and is deposited in the NHRS. Another ♀ paralectotype is labelled 'Kilimandjaro *Sjöstedt.* 1905–6 / Obstgarten - Steppe / 22 Mars [March] ('22' handwritten) / *Leptogaster artaphernes* m P. Speiser det. (handwritten except for 'P. Speiser det.') / Paratypus (red label with black submarginal border) / 10 52 (red label) / PARALECTOTYPE *Leptogaster artaphernes* Speiser, 1910 by T. Dikow 2001 (yellow label)'. The specimen is directly mounted, is in poor condition (left pped, left meso leg, and abdomen broken (attached on a piece of cardboard); sct cracked), and is deposited in the NHRS.

Type locality and distribution (Fig. 26): Tanzania, Kilimandjaro area, Kibonoto (= Kibongoto), 3°10'S 37°05'E. Burundi, Cameroon, DR Congo, Ethiopia, Kenya, Malawi, Mozambique, South Africa, Tanzania, Togo, Uganda, Zambia, Zimbabwe.

Material examined: BURUNDI: 3♂♂ Rumonge, 3°58'S 29°26'E, 21.i.1950; CAMEROON: 3♂♂ Bossoum, 9°56'N 13°41'E, 1.iv., 18.v., 1–10.vi.1914; DR CONGO: 1♂ Kivu, 3°03'S 28°06'E; 2♀♀ Lulua, 5°55'S 25°46'E, iv.1933; 1♂ Albertville, 5°55'S 29°12'E, xii.1918; 1♂ Baudouinville, 7°03'S 29°47'E, 19.i.1933; ETHIOPIA: 2♂♂ Harer, 09°19'N 42°07'E; KENYA: 1♂ Lake Victoria, 0°09'S 34°51'E, v.1912; 1♀ Kuja Valley, 0°48'S 34°34'E, 30.iv.–1.v.1911; 2♀♀ Gelegele River, 0°53'S 35°02'E, vi.1913; 1♂ Nairobi, 1°16'S 36°48'E, xi.–xii.1911; 1♀ Kibwezi, 2°24'S 37°57'E, 2–4.iv.1911; MALAWI: 1♀ Mponela, 13°30'S 33°42'E, 26.ii.1987; 1♀ Senga Bay, 13°42'S 34°37'E, 7–8.iii.1987; 3♀♀ 1♂ 1? Zomba, 15°18'S 35°10'E; MOZAMBIQUE: 1♂ Nampula, 15°00'S 39°00'E, 19.ii.1982; SOUTH AFRICA: *Northern Prov:* 1♂ Ofcolaco, 2430AB, 20.ii.1980; TANZANIA: 1♀ Ukerewe, 2°01'S 32°58'E, 1911; 1♀ Dar-es-Salam, 6°48'S 39°16'E, 11–20.xii.1961; 1♀ vii.1902; 1♂ NW Tanganyika, 1910; TOGO: 1♂ Bismarckburg, 8°11'N 0°41'E, 9–11.v.1893; UGANDA: 1♀ 2♂♂ Abi Farm, 3°05'N 30°56'E, 12.xi.1958; 1♀ 2♂♂ Ankole, 0°43'N 30°11'E, 16.xii.1962, 23–29.iv.1968; 1♀ 2♂♂ Mubende, 0°35'N 31°22'E, 19+22.iv.1966; 1♀ L. Namugabo, 0°04'N 32°15'E, 3.vi.1963; 2♀♀ Bugalla Island, 0°38'S 32°18'E, v.1912; 1♀ 1♂ 1? Entebbe, 0°03'N 32°27'E, 28.x.1912, 23.v.1913; 2♂♂ 1? Kome Island, 0°05'S 32°44'E, 15.xii.1918; 2♀♀ Mbarara, 0°36'S 30°38'E, 22–24.x.1911, 15.xi.1934; 1♀ 1♂ Lolui Island, 0°07'S 33°42'E, v.1965; ZAMBIA: 1♀ 1♂ Kasanka National Game Reserve, 12°30'S 30°15'E, 16–22.xii.1989; 1♀ Mungu, 15°16'S 23°04'E, 10.xii.1955; ZIMBABWE: 1♂ Harare, 17°46'S 31°02'E, i.1969; 1♂ Bindura, 17°18'S 31°19'E, i.1929; COUNTRY UNKNOWN: 1♀ Kawanda [Malawi, Uganda, or Zambia], 9.xi.1957; 1♂ Abyssinia, xi.1911; 1♂ no locality data. Depository: BMNH, ISNB, MRAC, NHMW, NMSA, SMNS, USNM, ZMHB, ZSMC.

Remarks: Illustration of ♂ terminalia by Theodor (1976: 20) is not *artaphernes* but *datis*.

Euscelidia datis (Walker, 1849) (*E. datis* species-group)

Figs 26, 28G–I, N

Leptogaster datis Walker, 1849: 483; Hull 1962: 300.
Euscelidia datis, Hermann 1926: 147; Oldroyd 1939: 28; Janssens 1953: 6 1954*b*: 400; Theodor 1976: 20; Oldroyd 1980: 356.
Lasiocnemus pilipes Curran, 1927: 2; Hull 1962: 309. **syn. n.**
Euscelidia pilipes, Oldroyd 1980: 357 (as junior synonym of *rapax*).

Redescription: *Head:* Black; fc yellow pruinose, fc gib indistinct, mystax yellow, many macrosetae; oc tr apruinose; occ silver pruinose, setae yellow; *Antennae* - scp brown, setae yellow; ped light brown, setae yellow and brown, white pruinose; pped light brown proximally, brown distad, white pruinose; apsel hyaline; *Thorax:* Black; sct black, sometimes with orange-red spots antero-laterally, predominantly apruinose, margins white pruinose, yellow setae scattered on surface, macrosetae: white or black, 1 npl s, 1 spal s; sctl white pruinose, ds sctl s and sctl long, yellow; *Legs* - yellow to brown; fem light brown, meta fem pale yellow proximally, brown medially, clubbed, club densely covered with long, erect yellow setae; pro and meso tib light brown, yellow stripe anteriorly, meta tib in proximal half light brown, distal half brown, yellow stripe not reaching tip anteriorly; emp distinct, very short; *Wings* - densely covered with microtrichia, brown coloured; ptero indistinct, brown; cell d terminating in 2 veins; hlt yellow; *Abdomen:* Brown; T yellow pruinose, T1 with long yellow setae, T2 in proximal half with long yellow setae laterally; ♂ *terminalia* Figs 28G–I, N (see also Figs 16–17 in Theodor (1976: 20)) - sur bent inwards distally; hypd with membranous area distally; d aed shea long, tip simple, pointed (Fig. 28N), lat apod bifurcated.

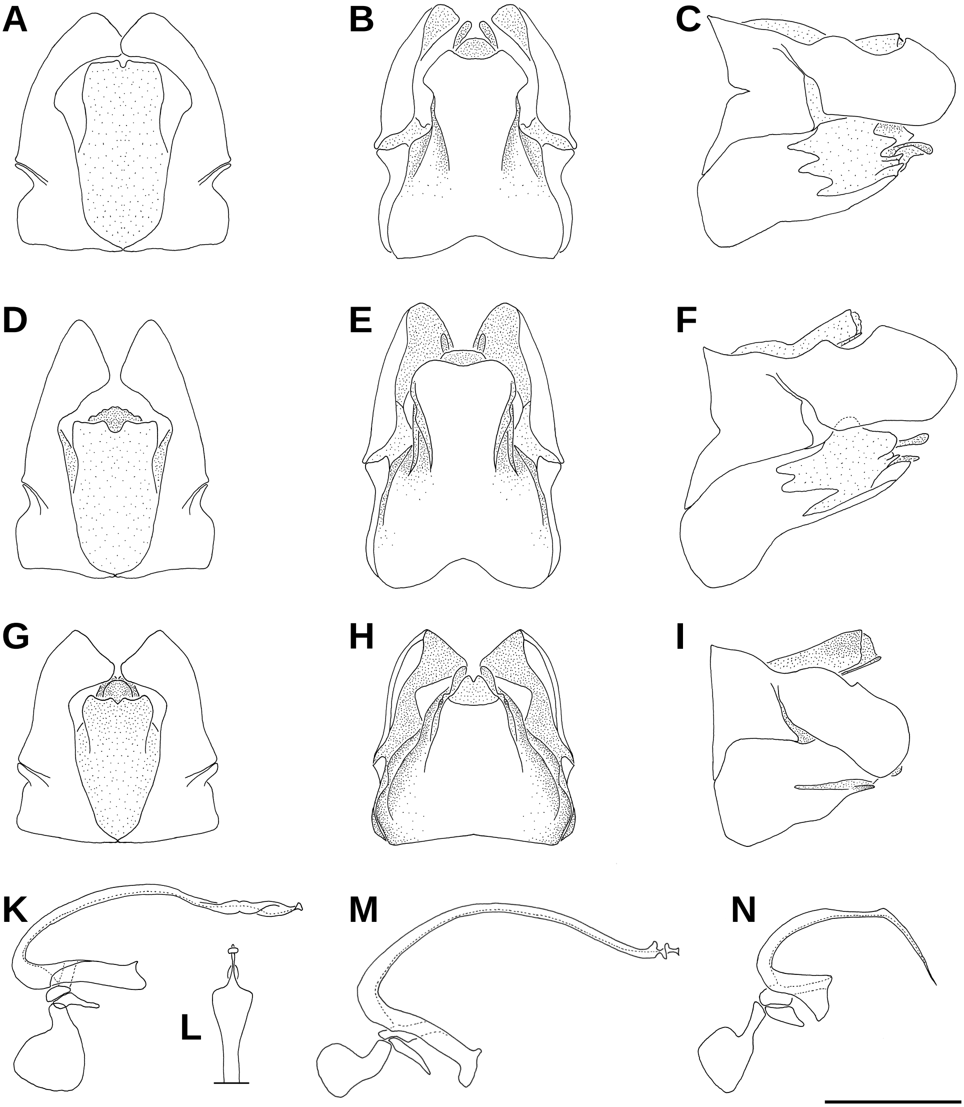

Fig. 28. ♂ terminalia. A–C, K, L. *Euscelidia lata* sp. n. A. Dorsal. B. Ventral. C. Lateral. K. Aedeagus lateral. L. Aedeagus tip dorsal. D–F, M. *E. milva* sp. n. D. Dorsal. E. Ventral. F. Lateral. M. Aedeagus lateral. G–I, N. *E. datis*. G. Dorsal. H. Ventral. I. Lateral. N. Aedeagus lateral. Scale line = 1 mm.

Type material - The lectotype of *Leptogaster datis* of undeterminable gender, here designated to preserve stability and make more universal the use of this name, is labelled 'Type (circular label with green submarginal border) / One of Walker's series so named. Edw ('Edw' handwritten) *Leptogaster datis* Walk. (handwritten on backside) / Sierra Leone (handwritten) Presented by the Rev D.F. Morgan (on backside) / HOLOTYPE *Leptogaster datis* Walker det. J.E. CHAINEY 1982 (handwritten) Holotype (circular label with red border, attached to the other label) / LECTOTYPE *Leptogaster datis* Walker, 1849 by T. Dikow 2001 (red label)'. The specimen is double mounted (minuten in rectangular piece of plastic), is in poor condition (antennae, left meso leg, and meta legs broken; abdomen broken from the third segment on), and is deposited in the BMNH. The ♂ holotype of *Lasiocnemus pilipes* is labelled 'Kwamouth, Congo 16°10'E 3°20'S. V.24.1915 [24.v.1915] / Lang & Chapin Collectors / *Lasiocnemus* Type *pilipes* ♂ Curran No. (red label, handwritten except for 'Type' and 'No.')'. The specimen is directly mounted, is in good condition, and is deposited in the AMNH. Curran apparently mentioned additional type specimens (1♀ allotype and 1♀ paratype from Faradje as well as 1♀ paratype from Garamba) in his description. These specimens could not be found in the AMNH collection and have not been examined.

Type locality and distribution (Fig. 26): Sierra Leone, no exact locality. Cameroon, Central African Republic, DR Congo, Kenya, Nigeria, Senegal, Sierra Leone.

Material examined: CAMEROON: 1♂ Bossoum, 9°56'N 13°41'E, 16.v.1914; CENTRAL AFRICAN REPUBLIC: 1♂ Fort Crampel, 6°59'N 19°11'E; DR CONGO: 1♂ Eala, 0°04'N 18°17'E, xii.1934; 1♂ Boma, 5°51'S 13°03'E; 1♂ Albertville, 5°56'S 29°12'E, xii.1918; KENYA: 1♂ Gelegele River, 0°53'S 35°02'E, vi.1913; NIGERIA: 1♂ Samaru, 11°10'N 7°37'E, 21–29.vii.1970; 1♂ Kateri, 9°42'N 7°27'E, 2.xii.1912 [genitalia slide examined]; SENEGAL: 1♂ Mpak, 12°27'N 16°14'W, 8.xi.1977; SIERRA LEONE: 1♂ Macdonald, 8°16'N 13°04'W, 25.xi.1993. Depository: BMNH, ISNB, MRAC, MZLU, ZMHB, ZSMC.

Remarks: *E. datis* is the oldest described species of the *datis* species-group. The abdomen of the lectotype is apparently broken and therefore the ♂ terminalia remained undescribed. Just before the end of this project I was able to investigate a single ♂ specimen from Sierra Leone in which the type locality of *datis* is situated. The ♂ terminalia of this specimen were indistinguishable from that of *pilipes* (of which some specimens had already been examined). Therefore, I am confident to delimit the boundaries of *datis* and consider the later described *pilipes* to be a junior synonym. Another ♂ specimen from Senegal, also examined at the end of the project, supports the new synonymy by extending the distribution further west where no other species of the species-group has so far been found. Theodor (1976: 20) illustrated the ♂ terminalia of this species, but labelled them *artaphernes*.

♀♀ specimens examined of representatives of the *datis* species-group: BENIN: 1♀ Cotonou, 6°21'N 2°26'E, 29.v.1914; BURKINA FASO: 1♀ Soumousso, 11°01'N 4°03'W, 11.x.1979; BURUNDI: 4♀♀ 2?? Rumonge, 3°58'S 29°26'E, 17.iv.1949, 21+22.i.1950; 1♀ Minago, 3°47'S 29°21'E, 5.iv.1949; 1♀ Mutonga, 3°23'S 30°29'E, 1.vi.1952; CAMEROON: 17♀♀ 1? Bossoum, 9°56'N 13°41'E, 15, 16, 22, 23, 29.v., 1–10, 11–20.vi.1914; 1♀ Limbe, 4°01'N 9°11'S, 18.iii.1984; 1♀ Kribi, 2°55'N 9°54'E, 28–29.xi.1987; 1♀ Campo, 2°22'N 9°49'E, 28–29.iii.1974; 1♀ Johann-Albrechtshöhe, iii.1896; CENTRAL AFRICAN REPUBLIC: 1♀ Fort Crampel, 6°59'N 19°11'E; 1♀ Dzanga-Sangha Reserve, 2°55'N 16°15'E, 6.vii.1998; DR CONGO: 1♀ Eala, 0°04'N 18°17'E, 1.xi.1939; 1♀ Bukavo, 2°30'S 28°51'E, 18.xii.1952; 1♀ Kivu area, 3°03'S 28°06'E; 3♀ ♀ Boma, 5°51'S 13°03'E; 2♀ ♀ Lulua, 5°55'S 25°46'E, xii.1932,.iv.1933; 1♀ Kasal; GHANA: 1♀ Akosombo, 6°18'N 0°03'E, 22–25.vi.1973; 1♀ Achimota, 5°37'N 0°14'W, 12.x.1949; IVORY COAST: 1♀ Yapi, 6°26'N 3°51'E, ix.1915; KENYA: 1♀ Mt. Elgon, 1°06'N 34°34'E, 8–13.vi.1911; 2♀ ♀ Kuja Valley, 0°48'S 34°34'E, 30.iv.–1.v.1911; 1♀ Masa Reserve, 1°26'S 34°55'E, 17.v.1913; 1? Athi, 2°15'S 38°03'E, vi.1941; 1♀ Malindi, 3°13'S 40°07'E, v.1973; MALAWI: 2♀ ♀ 1? Senga Bay, 13°42'S 34°37'E, 7–8.iii.1987; NIGERIA: 2♀ ♀ Samaru, 11°10'N 7°37'E, 21–29.vii.1970; 1♀ Baro, 8°36'N 6°25'E, 14–16.x.1910; 1? Onitsha, 6°09'N 6°46'E, vii.1910; 1? Lagos, 6°29'N 3°22'E, 3.xii.1956; 1♀ Apapa, 7°12'N 4°01'E, 24.iii.1963; 1♀ Mokwa, 9°16'N 5°02'E, 11–19.viii.1970; SENEGAL: 1♀ Ziguinchor, 12°34'N 16°17'W, 13.viii.1979; SIERRA LEONE: 1♀ 2?? Freetown, 8°29'N 13°14'W, 1940; 1? no additional data; TANZANIA: 1♀ Ruo Valley, 10°13'S 39°34'E, 5.iii.1913; 1♀ NW Tanganjika; TOGO: 1♀ Hinterland; UGANDA: 1♀ Pakelle, 3°22'N 31°51'E, 17.xi.1958; 2♀ Ngora, 2°06'N 33°26'E, 15–16.xi.1948; 1♀ Serere, 1°31'N 33°26'E, 15.ix.1957; 1♀ Buwalasi, 1°11'N 34°14'E, 20–21.xi.1948; 1♀ Nagongera, 0°46'N 34°00'E, 15.v.1958; 1♀ Kitega, 0°42'N 30°51'E, 11.vi.1950; 1♀ Tororo Hills, 0°42'N 34°10'E, v.1951; 1♀ Entebbe, 0°03'N 32°27'E, 28.x.1912; 1♀ Masaka, 0°30'S 31°45'E, 1.xii.1948; 1? Bugalla Island, 0°38'S 32°20'E, v.1912; 1♀ Madi county, 2°48'S 31°15'E, v.1927; COUNTRY UNKNOWN: 4♀ ♀ 1? no locality data. Depository: AMNH, BMNH, CUIC, ISNB, MRAC, NMSA, USNM, ZMHB, ZMUC, ZSMC.

Distribution of ♀ ♀ of *datis* species-group (Fig. 26): Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, DR Congo, Ghana, Ivory Coast, Kenya, Malawi, Nigeria, Senegal, Sierra Leone, Tanzania, Uganda.

Euscelidia lata sp. n. (*E. datis* species-group)

Figs 8C, 9F, 26, 28A–C, K–L

Etymology: Latin adjective *latus* = wide, broad; refers to the widened distal tip of the dorsal aedeagal sheath (Fig. 28L).

Description: *Head:* Black; fc yellow pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp black, setae white; oc tr apruinose; occ silver pruinose, many white setae; *Antennae* - scp dark brown, white setae ventrally, white pruinose; ped brown, either white or black setae ventrally and black setae dorsally, white pruinose; pped brown, ventrally light brown, white pruinose; apsel hyaline.

Thorax: Black; ppro peg large, silver pruinose; sct bluish-black, red spots antero-laterally, apruinose, margins silver pruinose, surface covered with long yellow setae, white setae on pruinose part; macrosetae: white, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s long, white; *Legs* - orange and dark brown; pro fem orange, meso fem orange, antero-medially brown, meta fem clubbed, pale yellow proximally, proximal half of club black, distal half orange, club with erect yellow setae; pro tib light brown, pale yellow stripe anteriorly, meso tib brown, pale yellow stripe anteriorly, meta tib orange to black, pale yellow stripe not reaching tip anteriorly; first tar pale yellow, brown distad, remaining tar black, setae black; emp distinct, very short; *Wings* - densely covered with microtrichia, brown coloured; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Orange to black; T predominantly black, anterior and posterior margins orange, yellow pruinose, T1 with many long yellow setae, T2 in proximal half with long yellow setae laterally, remaining T with short yellow and brown setae, S yellow pruinose, setae yellow; ♂ *terminalia* Figs 28A–C, K–L - sur bent inwards distally; hypd distally broadened; d aed shea long, tip Fig. 28L, lat apod bifurcated.

Type material - The ♂ holotype is labelled 'COTE D'IVOIRE: Near Palmindustrie about 15 km West of Fresco 05°06'N 05°43'W JGH Londt 24.iv.1989 Airfield/Forest edge / HOLOTYPE *Euscelidia lata* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is directly mounted, is in excellent condition, and is deposited in the NMSA. The 4♀♀ 4♂♂ paratypes have same labels as holotype except 'PARATYPE *Euscelidia lata* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimens are directly mounted, are in good to excellent condition, and are deposited in the NMSA.

Type locality and distribution (Fig. 26): Ivory Coast, Fresco (15 km W), 5°06'N 5°43'W. Cameroon, Ivory Coast, Liberia.

Material examined: CAMEROON: 1♂ Limbe, 4°01'N 9°11'E, 17.iii.1984; 1♂ Yaounde, 3°52'N 11°30'E, 5.xi.1987; 1♂ Yaounde; 1♂ Edea, 3°48'N 10°07'E, 31.xii.1977; 2♂♂ Kribi, 2°56'N 9°54'E, 19.iii.–7.iv.1974; 1♂ Campo, 2°22'N 9°49'E, 28–29.iii.1974; IVORY COAST: 2♀♀ 3♂♂ Abidjan, 5°19'N 4°00'W, 21.iv.1989; LIBERIA: 1♂ Bakratown (? = Baka, 6°11'N 8°47'W – plotted as such in Fig. 26), x.1926. Depository: MZLU, NMSA, USNM, ZMHB, ZSMC.

Euscelidia milva sp. n. (*E. datis* species-group)

Figs 25, 26, 28D–F, M

Etymology: Latin noun *milvus* = kite, hawk; refers to the predatory habit of all Asilidae.

Description: *Head:* Black; fc yellow pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp black, setae white; oc tr apruinose; occ silver pruinose, many white and yellow setae; *Antennae* - scp dark brown, white setae ventrally, white pruinose; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown or orange, white pruinose; apsel hyaline.

Thorax: Black; ppro peg large, silver pruinose; sct bluish-black, red spots antero-laterally, predominantly apruinose, margins silver pruinose, surface covered with long yellow setae, white setae on pruinose part; macrosetae: white, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s long, white; *Legs* - orange to dark brown; pro fem orange, meso fem orange, antero-medially brown, meta fem clubbed, pale yellow proximally, proximal half of club black, distal half orange, club with erect yellow setae; pro tib light brown, pale yellow stripe anteriorly, meso tib brown, pale yellow stripe anteriorly, meta tib orange to black, pale yellow stripe not reaching tip anteriorly; first tar pale yellow, brown distad, remaining tar black, setae black; emp distinct, very short; *Wings* - densely covered with microtrichia, brown coloured; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Orange to black; T predominantly black, anterior and posterior margins orange, yellow pruinose, T1 with many long yellow setae, T2 in proximal half with long yellow setae laterally, remaining T with short yellow and brown setae, S yellow pruinose, setae yellow; ♂ *terminalia* Figs 28D–F, M - sur bent inwards distally; hypd enlarged proximally; d aed shea long, tip Fig. 28M, lat apod bifurcated.

Type material - The ♂ holotype is labelled 'W-Africa: Ghana; ca. 2 km NE' Hohoe: Bodenabbaugebiet [a place where soil is produced] BARKEMEYER (handwritten except for 'W-Africa: Ghana' and 'BARKEMEYER') 9.10.1998 [9.x.1998] (handwritten on backside of label) / HOLOTYPE *Euscelidia milva* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is directly mounted, is in excellent condition (♂ terminalia attached to specimens pin in micro vial), and is deposited in the NMSA.

A ♂ paratype with the same locality data as the holotype, collected on 8.x.1998, and 'PARATYPE *Euscelidia milva* sp. nov. det. T. Dikow 2001 (yellow label)' is directly mounted, is in excellent condition, and is deposited in the NMSA. A ♂ paratype is labelled 'W-Africa: Ghana; ca. 2 km NE' Hohoe: 'Farmland' am Folibli BARKEMEYER (handwritten except for 'W-Africa: Ghana' and 'Barkemeyer') 8.10.1998 [8.x.1998] (handwritten on backside of label) / PARATYPE *Euscelidia milva* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is directly mounted, is in very good condition stylus of antennae broken), and is deposited in the NMSA. A ♂ paratype is labelled 'a in cop. with b. (handwritten) / NIGERIA: N.W. State Mokwa. Zugurma. R. Eku. 11–19.viii.1970. P.H. Ward. B.M. 1970-604 / PARATYPE *Euscelidia milva* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is double mounted (minuten in block of foam), is in very good condition (right meta leg broken), and is deposited in the BMNH. A ♀ paratype is labelled 'b in cop. with a. (handwritten) / NIGERIA: N.W. State Mokwa. Zugurma. R. Eku. 11–19.viii.1970. P.H. Ward. B.M. 1970-604 / PARATYPE *Euscelidia milva* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is double mounted (minuten in block of foam), is in good condition (met legs broken), and is deposited in the BMNH. A ♂ paratype is labelled 'NIGERIA: N.W. State Mokwa. Zugurma. R. Eku. 11–19.viii.1970. P.H. Ward. B.M. 1970-604 / PARATYPE *Euscelidia milva* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is double mounted (minuten in block of foam), is in good condition (right meso tib and meta leg broken), and is deposited in the BMNH. A ♂ paratype is labelled 'UGANDA EAST MADI PARKELLE 17.11.58 [17.xi.1958] J. BOWDEN. / *Euscelidia artaphernes* Speiser det. H. Oldroyd, 1960. (handwritten except for 'det. H. Oldroyd, 196') / PARATYPE *Euscelidia milva* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is double mounted (minuten in rectangular piece of plastic), is in very good condition (♂ terminalia attached to specimens pin in micro vial), and is deposited in the BMNH.

Type locality and distribution (Fig. 26): Ghana, Hohoe, 7°09'N 0°27'E. Central African Republic, Ghana, Nigeria, Uganda.

Material examined: CENTRAL AFRICAN REPUBLIC: 1♂ Fort Crampel, 6°59'N 19°11'E. Depository: ZSMC.

Euscelidia rapax Westwood, 1850 (*E. datis* species-group)

Figs 27D–F, H

Euscelidia rapax Westwood, 1850: 232; Hermann 1926: 147; Engel & Cuthbertson 1934: 36; Cuthbertson 1939: 136; Oldroyd 1939: 28; Janssens 1953: 5; Lindner 1955: 28; Hull 1962: 305; Oldroyd 1980: 357.

Redescription: *Head:* Black; fc yellow pruinose, fc gib distinct, mystax yellow, many macrosetae, nearly as long as prob; oc tr apruinose; occ silver pruinose, setae yellow; *Antennae* (ped and pped broken) - scp brown, yellow setae ventrally; *Thorax:* Black; sct black, 2 orange spots antero-laterally, predominantly apruinose, margins white pruinose, yellow setae on anterior, lateral, and posterior margins, leaving dorsal surface nearly uncovered; sctl white pruinose, ds sctl s and sctl s long, yellow; *Legs* - red-orange to brown; pro and meso fem light brown, meso fem with brown ring medially, meta fem pale yellow proximally, brown medially, orange distad, clubbed, club densely covered with long, erect yellow setae; pro and meso tib brown, yellow stripe anteriorly, meta tib orange to light brown, yellow stripe not reaching tip anteriorly; emp distinct, very short; *Wings* - densely covered with microtrichia, brown coloured; ptero indistinct, brown; cell d terminating in 2 veins; hlt light brown; *Abdomen:* Brown; T on anterior and posterior margins orange, grey pruinose, setae yellow, T1 with long yellow setae, T2 in proximal half with yellow setae laterally; ♂ *terminalia* Figs 27D–F, H - sur bent inwards distally; hypd proximally greatly enlarged, with rectangular membranous area ventrally; d aed shea long, tip broken, lat apod bifurcated.

Type material - The ♂ lectotype, here designated to preserve stability and make more universal the use of this name, is labelled ‘*Euscelidia rapax* Westw Trans Ent Soc Vol 5 pl 23 Afr. trop?. (handwritten) / W / WESTWOOD’S TYPE OF *Euscelidia rapax* Tr Ent soc Vol V p232 MS. (1902) by J. W. Yerbury (species name and literature citation handwritten) / Asil. 1. (handwritten) / TYPE Dip.: 152 *Euscelidia rapax* Westwood Hope Dept. Oxford (species name and type no. handwritten) / LECTOTYPE *Euscelidia rapax* Westwood, 1850 by T. Dikow 2001 (red label)’. The specimen is double mounted (minuten in rectangular piece of cardboard), is in good condition (left pro leg broken, abdomen broken, but attached to piece of cardboard), and is deposited in the OXUM.

Type locality and distribution: ‘Africa tropicali?’, no exact locality, distribution uncertain.

Remarks: No additional specimens of this species have been examined. The tip of the dorsal aedeagal sheath is apparently broken in the lectotype. The ♂ terminalia of all other species in the species-group, however, cannot be related to the terminalia found in *rapax*.

Euscelidia discors Speiser, 1913

Euscelidia discors Speiser, 1913: 141; Hermann 1926: 147; Hull 1962: 305; Oldroyd 1980: 356.

Type material - The 1♀ 3♂♂ syntypes have to be considered lost. I was unable to locate the depository for the type specimens. The concept of *discors* remains unclear and no neotype designation is possible at this stage.

Type locality (Fig. 16): Cameroon, Douala, 4°02'N 9°42'E.

Remarks: Speiser’s description is very poor in providing information that is useful for the identification of the species. Generally, many species would fit that description. There is a specimen deposited in the ZSMC that was identified as *E. discors* by E. O. Engel, but it is a representative of *E. procula* - this might direct to a probable synonymy of the two species with *procula* then being the senior synonym. Although I examined many specimens of *Euscelidia* from Cameroon I am not in the position to make further comments about this species. The type locality is plotted in Fig. 16.

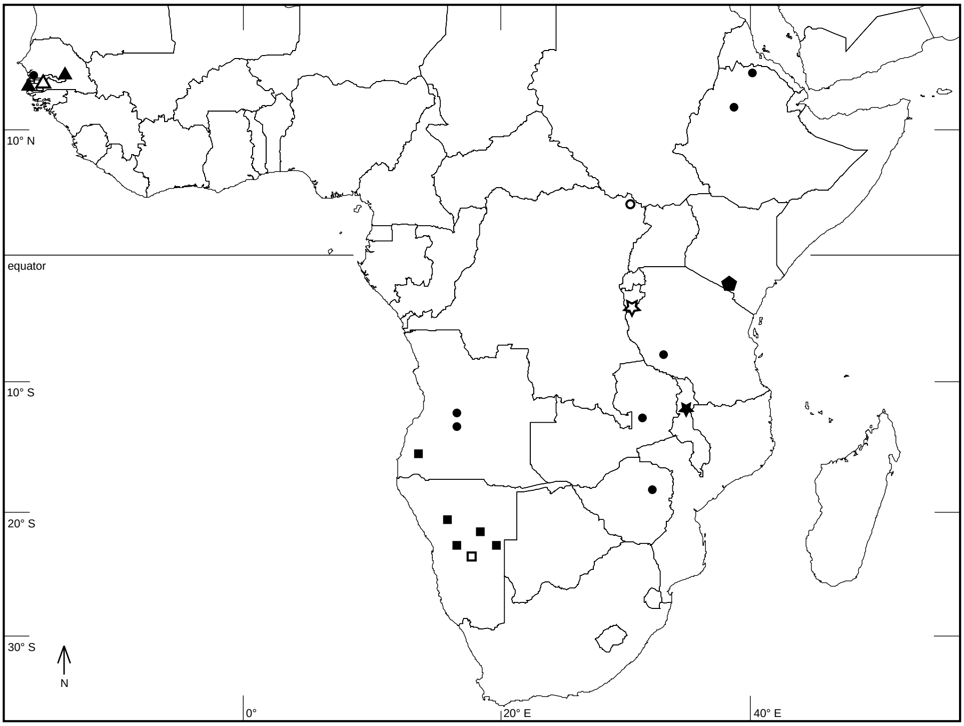

Fig. 29. Distribution. *Euscelidia acuminata* sp. n., squares; *E. crena* sp. n., pentagon; *E. dorata*, circles; *E. hesperia* sp. n., triangles; *E. trifoliata*, stars.

Euscelidia dorata Oldroyd, 1970

Figs 29, 30

Euscelidia dorata Oldroyd, 1970: 220 1980: 356.

Diagnosis: The species is distinguished from congeners by the entirely pruinose sct, only four setae comprising the mystax, vein R_4 bulging anteriorly constricting cell r_{2+3}, and features of the ♂ terminalia (very long d aed shea).

Redescription: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, 4 macrosetae, as long or longer than prob; oc tr yellow pruinose dorsally; occ yellow pruinose, few white setae; *Antennae* - scp and ped brown, setae dark brown; pped brown, white pruinose; apsel brown; *Thorax:* Brown; sct hump-backed, red-brown, entirely covered with white pruinosity, 3 indistinct median stripes shine through the pruinosity, macrosetae: yellow, 1 npl s, 1 spal s; very few setae on anepst directing anteriorly; sctl silver pruinose, ds sctl s and sctl s very short; *Legs* - yellow to brown; fem light brown, meta fem yellow proximally, clubbed; pro and meso tib yellowish-brown, meta tib brown; emp long, longer than half of length of clw; *Wings* - microtrichia densely arranged on remigium; ptero distinct, brown; vein R_4 bulging anteriorly constricting cell r_{2+3}, cell d terminating in 3 veins; hlt yellow; *Abdomen:* yellow or brown; T white pruinose, T1 with white setae, remaining T with short white and brown setae, S white pruinose; ♂ *terminalia* Fig. 30 - sur pointed distally, lobe ventrally; hypd ventral margin straight; gonst large, prominent structure arising from proximal hypd; d aed shea tubular, very long (extending ♂ terminalia); lat apod simple.

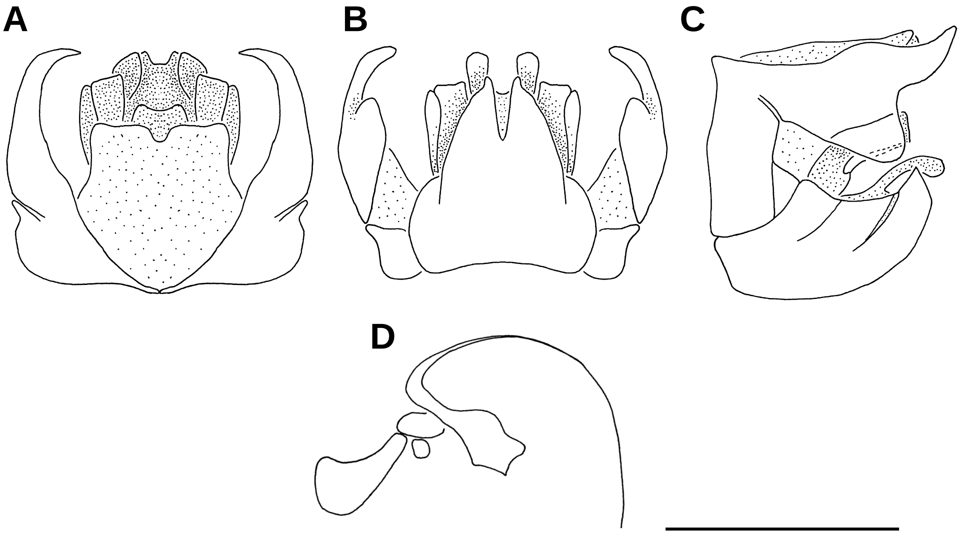

Fig. 30. ♂ terminalia of *Euscelidia dorata*. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. Scale line = 1 mm.

Type material - The ♂ holotype is labelled ‘HOLOTYPUS (red label with black submarginal border) / Congo Belge, P. N. G. [Parc National Garamba] Miss. H. De Saeger II/fd/15, 22-IX-1951 Rec. H. De Saeger. 2464 / *Euscelidia dorata* Oldroyd det. H. Oldroyd 1966 HOLOTYPE (handwritten except for ‘det. H. Oldroyd 19’)’. The specimen is double mounted (minuten in block of foam), is in very good condition (right pro leg broken; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the MRAC.
The ♀ paratype is labelled ‘Congo Belge, P.N.G. Miss H. De Saeger II/gd/11, 12-VII-1951 Rec. H. De Saeger. 2071 / *Euscelidia dorata* Oldr. det. H. Oldroyd 1966. (handwritten except for ‘det. H. Oldroyd 1966’) / Paratype (red label)’. The specimen is double mounted (minuten in block of foam), is in fairly poor condition (antennae, right pro leg, left meso and meta legs, and abdomen broken), and is deposited in the ISNB. The ♂ paratype is labelled ‘Congo Belge, P.N.G. Miss H. De Saeger II/fe/Gar, 16-II-1951 Rec. J. Verschuren. 1269 / Paratype (red label) / *Euscelidia dorata* Oldr. det. H. Oldroyd 1966. (handwritten except for ‘det. H. Oldroyd 1966’)’. The specimen is double mounted (minuten in block of foam), is in fairly good condition (antennae, left pro leg, and all right legs broken), and is deposited in the ISNB.

Type locality and distribution (Fig. 29): DR Congo, Garamba National Park, 4°06'N 29°27'E. Angola, DR Congo, Ethiopia, Tanzania, The Gambia, Zambia, Zimbabwe.

Material examined: ANGOLA: 1♀ Nova Lisboa, 12°45'S 15°43'E, 5–7.iii.1972; 1♀ Alto Hama, 12°14'S 15°33'E, 7.iii.1972; DR CONGO: 11♀♀ 1♂ 1? Garamba National Park, 4°06'N 29°27'E, 15.ii.1950, 17.ii., 27.iv., 30.vi., 22.ix., 23.xi., 10.xii., 20.xii., 26.xii.1951; ETHIOPIA: 1♀ Bahir Dar, 11°33'N 37°21'E, 11.x.1968; 1♀ Adowa, 14°10'N 38°54'E, 18.x.1957; TANZANIA: 1♀ Kafukola, 8°04'S 31°57'E, 12.i.1956;

THE GAMBIA: 1♀ Bakau, 13°29'N 16°41'W, 23.xi.1977; ZAMBIA: 1♂ Kasanka National Game Reserve, 12°30'S 30°15'E, 9–21.xii.1989; ZIMBABWE: 1? Harare, 17°49'S 31°02'E, 18.vi.1938. Depository: BMNH, ISNB, MRAC, MZLU, NMSA, SMNS, USNM.

Euscelidia erichthenii sp. n.

Figs 31, 32, 61

Etymology: The specific name '*erichthenii*' is a noun in apposition. The name is proposed by the Gesellschaft für Biologische Systematik (Organisms, Diversity & Evolution) to acknowledge the contribution to the understanding of the evolution of Vertebrata made over many years by the palaeontologist Prof. Dr Erich Thenius, Vienna, Austria, who has been awarded an honorary membership of the society.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose sct and features of the ♂ terminalia (hypd bent upwards, divided into 2 lobes, d aed shea short, blunt).

Description: *Head:* Black; fc yellow pruinose, sometimes silver pruinose on lower facial margin, fc gib indistinct, mystax white, many macrosetae; prob and plp brownish-black with white setae; oc tr silver pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp dark brown, white setae ventrally; ped dark brown, brown setae ventrally and dorsally, white pruinose; pped dark brown, white pruinose; apsel dark brown.

Thorax: Black; ppro peg small, distinct, silver pruinose; anterior margin of sct yellow pruinose, lateral and posterior margins silver pruinose, 3 narrow median yellow pruinose stripes on sct, 2 lateral stripes sometimes reaching posterior margin, short yellow or white setae on pruinose part; macrosetae: 1 white npl s, 1 black spal s; sctl white pruinose, ds sctl s and sctl s short, white; *Legs* - yellow to brown; fem yellow proximally, brown distad, meta fem slightly clubbed, pale yellow stripe not reaching club dorsally, narrow longitudinal dark brown stripe laterally, setae white; tib brown, pale yellow stripe not reaching tip on meta tib anteriorly; first tar yellow proximally, brown distad, remaining tar brown, setae black; emp minute; *Wings* - hyaline, but microtrichia scattered on remigium and distal margin; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; T brown pruinose dorsally, grey pruinose laterally, T1 with long brown setae laterally, T2 in proximal half with white setae laterally, remaining T with yellow and brown setae, S grey pruinose; ♂ *terminalia* Figs 31–32 - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 large lobes; d aed shea short, blunt; lat apod simple.

Type material - The ♂ holotype is labelled 'ETHIOPIA Bahar Dar 12.10.1968 K.W. u. H. Harde leg (blue label) / *Euscelidia* spec. det. Miksch (handwritten except for 'det. Miksch') / HOLOTYPE *Euscelidia erichthenii* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is double mounted (minuten in rectangular piece of cardboard), is in very good condition (right meta leg broken; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the SMNS.

The 2♂♂ paratypes have same labels as holotype except 'PARATYPE *Euscelidia erichthenii* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimens are double mounted (minuten in rectangular piece of cardboard), are in very good condition (1♂ with right meta leg and pped broken), and are deposited in the SMNS.

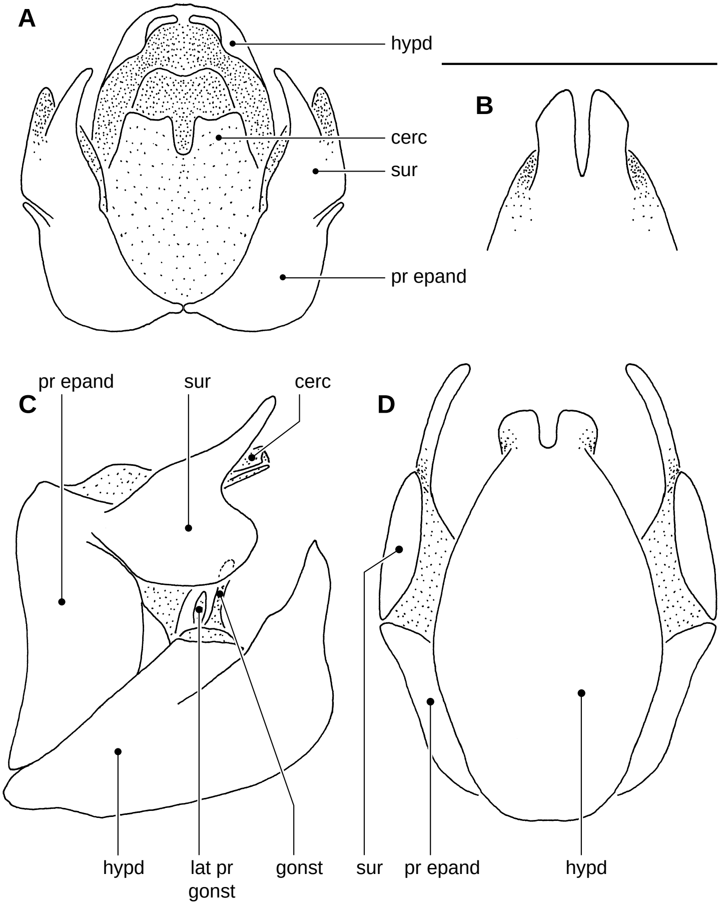
A
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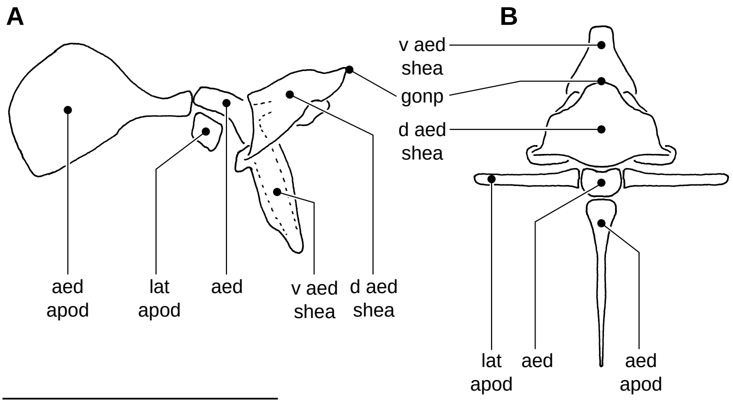
Fig. 31. ♂ terminalia of *Euscelidia erichthenii* sp. n. A. Dorsal. B. Posterior. C. Lateral. D. Ventral. Scale line = 1 mm.


A
aed apod
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v aed shea
d aed shea
B
v aed shea
gonp
d aed shea
lat apod
aed
aed apod

Fig. 32. Aedeagus of *Euscelidia erichthenii* sp. n. A. Lateral. B. Dorsal. Scale line = 1 mm.

Type locality and distribution (Fig. 61): Ethiopia, Bahar Dar (= Bahir Dar), 11°33'N 37°21'E. Ethiopia.

Material examined: 1♀ without locality label (SMNS) [probably caught at the same locality as type material].

Euscelidia fastigium Martin, 1964

Fig. 16

Euscelidia fastigium Martin, 1964: 276; Oldroyd 1980: 356.

Diagnosis: The species is distinguished from congeners by the entirely pruinose sct, only four setae comprising the mystax, and its distribution on Madagascar.

Redescription: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, 4 macrosetae; oc tr yellow pruinose dorsally; occ grey pruinose, few white setae; *Antennae* - scp and ped brown, setae dark brown; pped brown, white pruinose; apsel brown; *Thorax:* Brown; sct hump-backed, entirely covered with white and light brown pruinosity, macrosetae: yellow, 1 npl s, 1 spal s; very few setae on anepst directing anteriorly; sctl silver pruinose, ds sctl s and sctl s very short; *Legs* - yellow to brown; fem light brown, meta fem yellow proximally, clubbed; tib light brown to brown, yellow stripe anteriorly, not reaching tip on meta tib; emp long, longer than half of length of clw; *Wings* - microtrichia evenly scattered on remigium; ptero distinct, brown; cell d terminating in 3 veins; hlt yellow; *Abdomen:* brown; T white pruinose, T1 with white setae, remaining T with short white and brown setae, S white pruinose; ♂ *terminalia* - ♂♂ specimens unknown.

Type material - The ♀ holotype is labelled 'HOLOTYPE *Euscelidia fastigium* Chas. H. Martin (species name handwritten, red label) / MADAGASCAR Maj. [Majunga Province] Ambato-Boeni 23.VI.58 [23.vi.1958] F. Keiser (red label) / *Euscelidia fastigium* Martin (handwritten, yellow label with black submarginal border)'. The specimen is double mounted (minuten in triangular piece of cardboard), is in very good condition (right pro and left meso leg broken), and is deposited in the NHMB.

Type locality and distribution (Fig. 16): Madagascar, Ambato Boeny, 16°28'S 46°42'E. Madagascar.

Remarks: The species is apparently known only from the single type specimen. I was able to investigate only three additional specimens of *Euscelidia* from Madagascar that are clearly not belonging to *fastigium*. The poor condition of the material and the lack of male specimens decided me against describing these specimens as a new species. The label data are as follows: 1♀ Manjakatompo, 19°19'S 47°25'E, 1.xi.1948 (BMNH); 2?? Andringitra-Ambalavao, Plateau Soaindrana, 21°31'S 47°02'E, 14–17.i.1958 (NMSA).

Euscelidia festiva Janssens, 1954

Figs 33A–E, 61

Euscelidia festiva Janssens, 1954*a*: 123 1954*b*: 400; Oldroyd 1960: 409 1980: 356.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose sct, the densely arranged microtrichia on the wings, and the yellow legs.

Redescriptions: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, 10–12 macrosetae, sometimes nearly as long as prob; oc tr apruinose; occ yellow pruinose

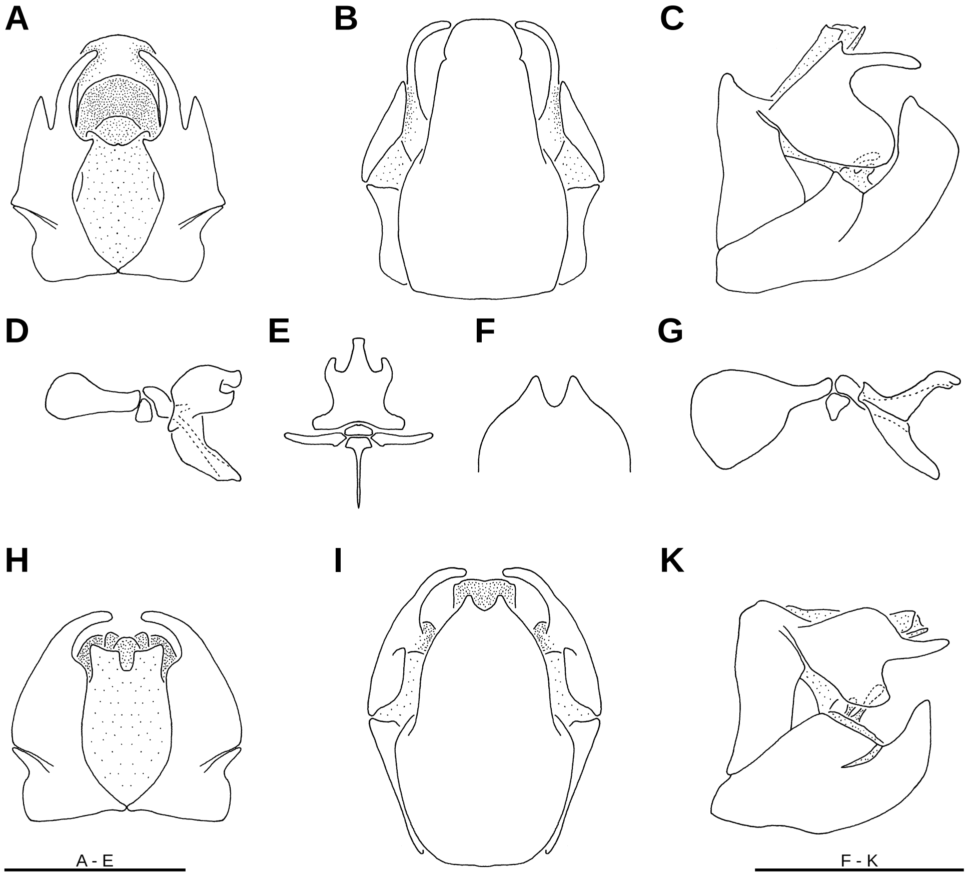

Fig. 33. ♂ terminalia. A–E. *Euscelidia festiva*. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. E. Aedeagus dorsal. F–K. *E. fistula* sp. n. F. Hyapndrium posterior. G. Aedeagus lateral. H. Dorsal. I. Ventral. K. Lateral. Scale lines = 1 mm.

dorsally, silver pruinose laterally, setae white; *Antennae* - scp and ped brown, setae brown; pped brown, white pruinose; apsel dark brown; *Thorax:* Black; sct predominantly apruinose, anterior, lateral, and posterior margins yellow pruinose, yellow setae on pruinose part, dc setae sometimes distinct, brown; sctl silver pruinose, ds sctl s and sctl s long, yellow; *Legs* - yellow; meta fem pale yellow proximally, clubbed, setae white; meta tib yellow proximally, brown distad; emp minute; *Wings* - densely covered with microtrichia; ptero distinct, brown; cell d terminating in 3 veins; hlt light brown; *Abdomen:* Black; T2–3 and proximal half of T4 predominantly apruinose, grey pruinose laterally, remaining T grey pruinose, S2 apruinose, remaining S grey pruinose; ♂ *terminalia* Figs 33A–E - sur pointed distally, large lobe ventrally; hypd bent upwards, enlarged distally; d aed shea short, blunt, lat pr aed short; lat apod simple.

Type material - The holotype of undeterminable gender is labelled 'HOLOTYPUS (red label with black submarginal border) / TYPE (red label with black submarginal border) / Congo belge: P. N. U. [Parc National de l'Upemba] Kafwi af. dr. Lufwa [rivière Kafwi, affluente droite Lufwa] (1.780 m.) 5-III-1948 Mis. G. F. de Witte. 1375a / E. Janssens det., 1952 *Euscelidia festiva* Em. Janssens (handwritten except for 'E. Janssens det., 19')'. The specimen is double mounted (minuten in block of foam), is in fairly good condition (antennae, meta legs, and terminal segments of abdomen broken), and is deposited in the MRAC.

21 paratypes (11♀♀ 6♂♂ 4?) from the Upemba National Park are deposited in the ISNB. The following list will only provide the locality data, date of collection, and collector: 5♀♀ 3♂♂ 2?? Mukana, 1810 m, 4+6+18.iii.1948, G.F. de Witte; 1♀ 1? Grande Kafwe, 1780 m, 5.iii.1948, G.F. de Witte; 3♀♀ 1♂ 1? River Kafwiaf, 1780 m, 5.iii.1948, G.F. de Witte; 1♀ 2♂♂ Kabwekanono, 1815m, 6+8.iii.1948, G.F. de Witte; 1♀ Lusinga, 13.vi.1945, G.F. de Witte. Two additional paratypes apparently belong not to *E. festiva*, but are species of *Leptogaster*.

Type locality and distribution (Fig. 61): DR Congo, Upemba National Park, Lufwa, 9°40'S 27°12'E. Cameroon, DR Congo, Malawi, Nigeria, Uganda, Zambia.

Material examined: CAMEROON: 2♀♀ Bossoum, 9°56'N 13°41'E, 1–10.v.1914; 1♀ 1♂ Kanjang, 6.v.1909; DR CONGO: 1♀ 2♂♂ Garamba National Park, 4°06'N 29°27'E, 18.v.1950, 27.ix.1950, 11.vi.1952; 1? Kamina [several such localities], 1.iii.1960; MALAWI: 1♀ Mulanje, 15°57'S 35°37'E, 13.i.1913; NIGERIA: 1♂ Samaru, 11°10'N 7°37'E, 24.vi.1968; UGANDA: 1? Abi Farm, 3°05'N 30°56'E, 12.xi.1958; 1♂ 1? Mbale-Sipi, 1°05'N 34°09'E, 14.v.1957; ZAMBIA: 1♂ Kasanka National Game Reserve, 12°30'S 30°15'E, 16–22.xii.1989; COUNTRY UNKNOWN: 1? no locality data. Depository: BMNH, ISNB, MRAC, NMSA, ZMHB.

Remarks: Additionally to the specimens examined, Oldroyd (1960: 409) listed the species from Handeni (5°26'S 38°01'E), Tanzania.

Euscelidia fistula sp. n.

Figs 14, 33F–K

Etymology: Latin noun *fistula* = tube, pipe; refers to the tubular dorsal aedeagal sheath.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose sct, the densely arranged microtrichia on the wings, and features of the ♂ terminalia (d aed shea tubular, hypd bent upwards).

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; prob black, setae white, plp brown, setae brown; oc tr apruinose; occ silver pruinose, setae white and yellowish; *Antennae* - scp brown, white setae ventrally, white pruinose; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel brown.

Thorax: Black; ppro peg large, silver pruinose; sct predominantly apruinose, silver pruinosity restricted to anterior, lateral, and posterior margins (sometimes antero-lateral margin apruinose), white setae on pruinose part, yellow setae scattered on apruinose surface; presut dc setae sometimes distinct, macrosetae: 1 white or black npl s, 1 black spal s; sctl white pruinose, ds sctl s and sctl s long, yellow or brown; *Legs* - yellow to brown; fem light brown, meta fem slightly clubbed, pale yellow proximally, narrow longitudinal dark brown to black stripe laterally, setae white; pro and meso tib light brown, pale yellow stripe anteriorly, meta tib light brown, pale yellow stripe not reaching tip anteriorly, black longitudinal stripes laterally; tar 1–3 light brown, brown distad, remaining tar brown, setae black; emp minute; *Wings* - densely covered with microtrichia; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; T sometimes orange on anterior and posterior margins, predominantly brown pruinose, anterior, lateral, and posterior margins narrowly grey pruinose, T1 with long yellow and brown setae laterally, T2 with white setae laterally, remaining T with yellow and brown setae, S grey pruinose; ♂ *terminalia* Figs 33F–K - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 short lobes; d aed shea tubular, medium length; lat apod simple.

Type material - The ♂ holotype is labelled 'Johannesburg Transvaal leg. Zumpt / E. Janssens det., 1956 *Euscelidia festiva* E. Janssens (handwritten except for 'E. Janssens det., 195') / HOLOTYPE *Euscelidia fistula* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is double mounted (attached to rectangular piece of cardboard), is in very good condition (♂ terminalia attached to specimens pin in micro vial), and is deposited in the ISNB.
A ♀ paratype is labelled 'SOUTH AFRICA 2527CC Transvaal nr. Derby 3.II.1978 JGH. Londt Open grassveld area / PARATYPE *Euscelidia fistula* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is directly mounted, is in excellent condition, and is deposited in the NMSA. A ♀ paratype is labelled 'SUID-AFRIKA Potch [Potchefstroom] 7-1-1943 H.P.V. HEERDEN ('Potch' and date handwritten) / PARATYPE *Euscelidia fistula* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is double mounted (minuten in rectangular piece of cardboard), is in very good condition, and is deposited in the NMSA. A paratype of undeterminable gender is labelled 'PRETORIA 13.II.1957 L. Vari (date handwritten) / collection TRANSVAAL MUSEUM (blue label) / *Euscelidia* sp. det. H. Oldroyd 1973 (handwritten except for 'det. H. Oldroyd 19') / PARATYPE *Euscelidia fistula* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is directly mounted, is in good condition (left meta leg and abdomen from third segment broken), and is deposited in the NMSA. A ♀ paratype is labelled 'ZIMBABWE: 2028AD Matopos National Park Jan. 1977 Coll: Mr Fox / PARATYPE *Euscelidia fistula* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is directly mounted, is in relatively poor condition (left meta leg broken, abdomen damaged, specimen greasy), and is deposited in the NMSA.

Type locality and distribution (Fig. 14): South Africa, Gauteng Province, Johannesburg, 26°12'S 28°02'E. South Africa, Zimbabwe.

Material examined: SOUTH AFRICA: *Northern Prov:* 1? Marico, 24°13'S 26°54'E, ii.1918 [specimen in very poor condition]. Depository: BMNH.

Euscelidia flava sp. n.

Figs 34, 36

Etymology: Latin adjective *flavus* = golden-yellow; refers to the yellow pruinose scutum.

Diagnosis: The species is distinguished from congeners by the predominantly yellow pruinose sct and the densely arranged microtrichia on the wings.

Description: *Head:* Black; fc silver or light yellowish pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brown, setae white; oc tr apruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp light brown, brown setae dorsally, white pruinose; ped light brown, brown setae ventrally and dorsally, white pruinose; pped light brown, white pruinose; apsel brown.

Thorax: Brown to black; ppro peg small, distinct, silver pruinose; sct antero-laterally brown, predominantly yellow pruinose, indistinct apruinose spots laterally; macrosetae: 1 white npl s, 1 black spal s; sctl yellow pruinose, ds sctl s and sctl s long, yellow; *Legs* - yellow to brown; fem light brown to brown, meta fem pale yellow proximally, clubbed; pro tib yellow, meso and meta tib brown, pale yellow stripe not reaching tip anteriorly; first tar yellow, brown distad, remaining tar brown, setae black; emp about a fourth of length of clw; *Wings* - densely covered with microtrichia; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Brown; yellow pruinose, T1 with long white setae laterally, T2 in proximal half with white setae laterally, remaining T with short white and yellow setae, S yellow pruinose; ♂ *terminalia* Fig. 34 - sur not sharply pointed distally, lobe ventrally; hypd with pointed lobes distally; d aed shea medium length; lat apod bifurcated.

Type material - The ♂ holotype is labelled 'Ceylon [Sri Lanka], N. Prov. [Northern Province] 2 mls [3,2 km] E Paraiyanalankulam 20 mls [32 km] W Vavuniya 15.II.62. [15.ii.1962] Loc. 62 / Swept in dry forest / Lund University Ceylon Expedition 1962 Brinck-Andersson-Cederholm / HOLOTYPE *Euscelidia flava* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is directly mounted, is in excellent condition, and is deposited in the MZLU.

A ♂ paratype with the same label information, except for 'PARATYPE *Euscelidia flava* sp. nov. det. T. Dikow 2001 (yellow label)' is directly mounted, in relatively poor condition (antennae, prob, right pro tib, left meso leg, and right meso tarsus broken; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the MZLU. A ♀ paratype is labelled 'Ceylon, NW. Prov [North Western Province]

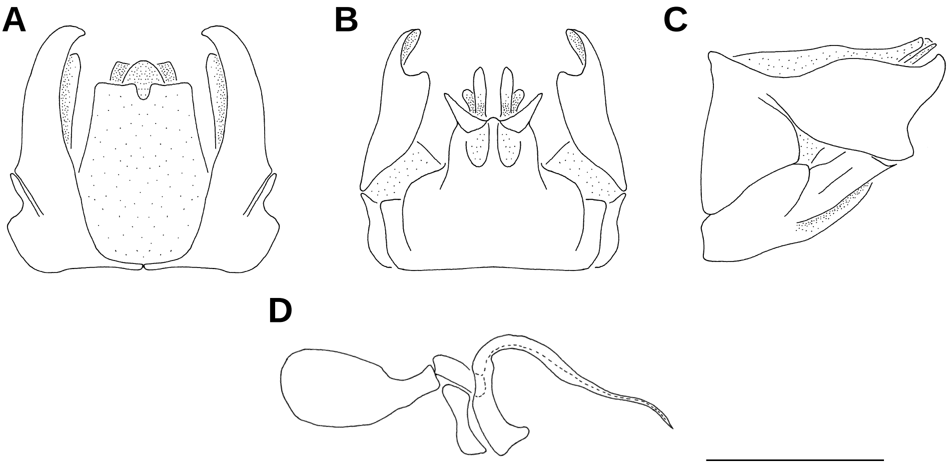

Fig. 34. ♂ terminalia of *Euscelidia flava* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. Scale line = 1 mm.

7 mls [11,2 km] NE Puttalam 1.II.62. [1.ii.1962] Loc. 43 / Swept on dry grassland / Lund University Ceylon Expedition 1962 Brinck-Andersson-Cederholm / PARATYPE *Euscelidia flava* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is directly mounted, is in excellent condition, and is deposited in the MZLU. A ♂ paratype and a paratype of undeterminable gender are labelled 'Ceylon, N Prov [Northern Province] Small stream 2 mls [3,2 km] E Mankulam 14.II.62. [14.ii.1962] Loc. 75 / Dry meadow [/ specimen] and Swept along roads in dry forest [undeterminable gender specimen] / Lund University Ceylon Expedition 1962 Brinck-Andersson-Cederholm / PARATYPE *Euscelidia flava* sp. nov. det. T. Dikow 2001 (yellow label)'. Both specimens are directly mounted, are in excellent condition (except for broken abdomen in one specimen), and are deposited in the MZLU.

Type locality and distribution (Fig. 36): Sri Lanka, Paraiyanalankulan, 8°46'N 80°10'E. Sri Lanka.

Material examined: Sri Lanka: 1♂ Ma Villu, 8°42'N 80°02'E, 17–21.ii.1979. 1♀ Kafukola, 8°04'S 31°57'E; 1♀ Gaikadawala, 13.iii.1976. Depository: USNM.

Euscelidia francoisi (Janssens, 1953), **comb. n.**

Figs 35, 46

Dolichoscius francoisi Janssens, 1953: 2; Hull 1962: 318; Oldroyd 1980: 356.
Dolichoscius longipes Janssens, 1954*a*: 120; Oldroyd 1980: 356. **syn. n.**

Diagnosis: The species is distinguished from congeners by the pale yellow wing veins C, Sc, and R_1, the narrow wing cell a_2, and the tuft of setae on the meta tib and tarsi.

Redescription: *Head:* Black; fc yellow pruinose, fc gib indistinct, mystax white, many macrosetae; oc tr silver pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp brown, brown setae ventrally, white pruinose; ped dark brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose proximally and ventrally; apsel hyaline; *Thorax:* Black; ppro peg small, distinct, silver pruinose; sct predominantly apruinose, bluish-black, anterior, lateral, and posterior margins silver pruinose, long white setae on pruinose part, presut and psut dc setae long, macrosetae: white, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s long, white; *Legs* - yellow to brown; pro fem light brown, meso fem light brown in proximal half, distal half brown, meta fem pale yellow proximally, clubbed, club brown; tib brown, yellow stripe not reaching tip anteriorly, distal half of meta tib and tar 1–4 with long brown setae laterally; emp minute; *Wings* - hyaline, very few microtrichia on remigium, veins yellow in proximal half of wing, brown distally, C, Sc, and R_1 completely pale yellow; ptero indistinct; cell d terminating in 3 veins; hlt yellow; *Abdomen:* Black; T predominantly brown pruinose, lateral margin grey pruinose, T1 with long white setae laterally, T2 in proximal third with white setae laterally, remaining T with short yellow and brown setae, S grey pruinose; ♂ *terminalia* Fig. 35 - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 lobes; d aed shea tubular, medium length; lat apod simple.

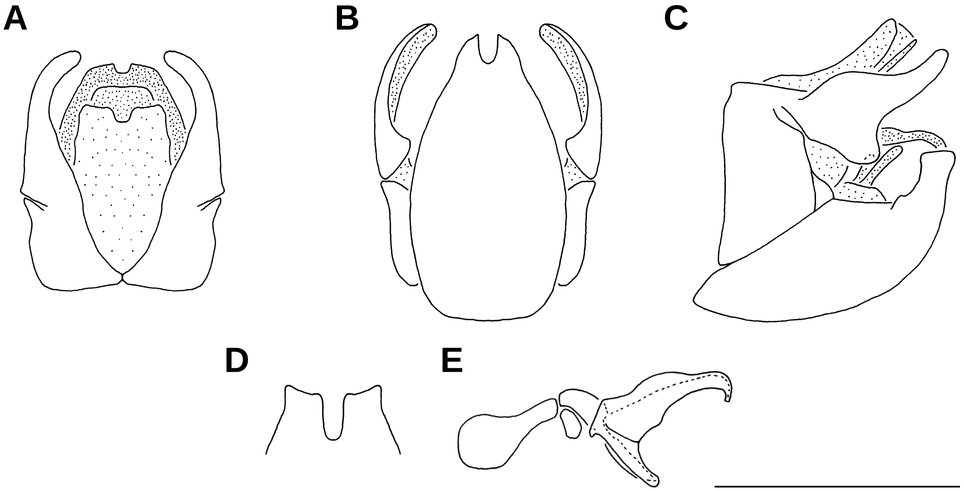

Fig. 35. ♂ terminalia of *Euscelidia francoisi*. A. Dorsal. B. Ventral. C. Lateral. D. Hypandrium posterior. E. Aedeagus lateral. Scale line = 1 mm.

Type material - The ♂ holotype of *Dolichoscius francoisi* is labelled 'Urundi: Terr. de Muhinga 11.V.1952 F.L. Francois ('Muhinga' and date handwritten) / Colline: Muhinga (Butezana) alt. 1700 m. ('Muhinga', 'Butezana', and '1700' handwritten) / E. Janssens det., 1953 *Dolichoscius Francoisi* n. sp. (species name and '53' handwritten) / TYPE (red label with black border around 'TYPE') / cf. Bull. Inst. Sc. Nat. Belg. XXIX, 1953, nº 42 p. 2, figs. 1–2 (citation handwritten) / R. I. Sc. N. B. I. G. 20.102 (numbers handwritten) / *Euscelidia francoisi* (Janssens, 1953) det. T. Dikow 2001'. The specimen is double mounted (minuten in block of foam), is in very good condition (right meta leg broken), and is deposited in the ISNB.

Two ♀♀ and one ♂ paratypes have same collection details as holotype. The specimens are double mounted (minuten in block of foam), are in very good condition, and are deposited in the ISNB. Two ♀♀ paratypes are labelled 'Urundi: Terr. de Bururi 9.II.1952 F.J. Francois ('Bururi' and date handwritten) / Colline: Bururi (Burursi) alt. 1900 m. ('Bururi', 'Bururis', and '1900' handwritten) / Paratype (red label with black border around 'Paratype') / *Euscelidia francoisi* (Janssens, 1953) det. T. Dikow 2001'. The specimens are double mounted (minuten in block of foam), are in very good condition, and are deposited in the ISNB.

The holotype of undeterminable gender of *Dolichoscius longipes* is labelled 'HOLOTYPUS (red label with black submarginal border) / TYPE (red label, black border around 'TYPE') / CONGO belge: P.N.U. Mukana (1.810 m.) 14-IV-1947 Mis. G.F. de Witte. 275a / COLL. Mus. Tervuren (black border) / E. Janssens det., 1951 *Dolichoscius longipes* E. Janss. (handwritten except for 'E. Janssens det., 19') / *Euscelidia francoisi* (Janssens, 1953) det. T. Dikow 2001'. The specimen is double mounted (minuten in block of foam), is in poor condition (right pped, right pro tib, right meso tarsus, left meta leg, and abdomen from fourth segment broken), and is deposited in the MRAC.

Type locality and distribution (Fig. 46): Burundi, Muhinga, 2°50'S 30°20'E. Burundi, DR Congo, Mozambique, Rwanda.

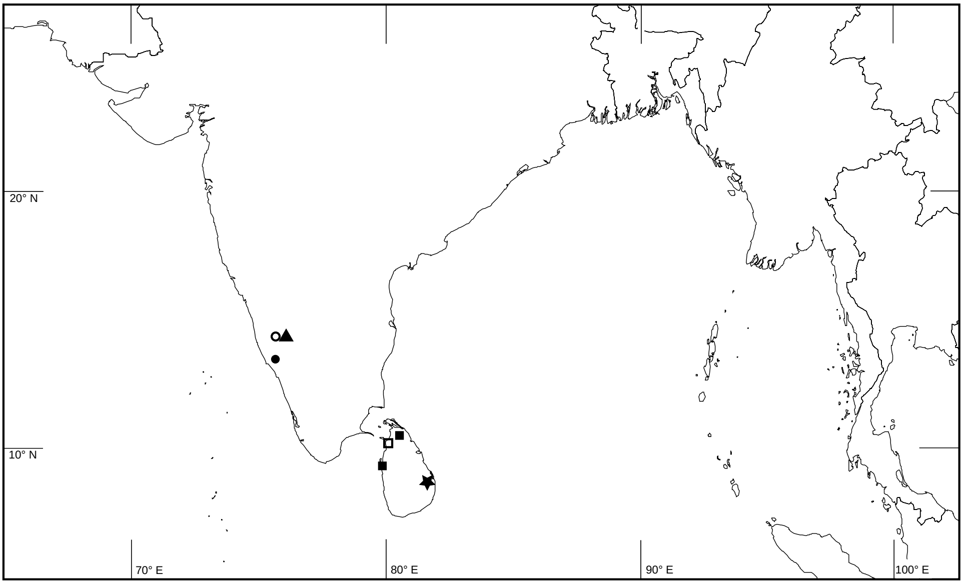

Fig. 36. Distribution. *Euscelidia cobice* sp. n., circles; *E. flava* sp. n., squares; *E. prolata* sp. n., star; *E. splendida* sp. n., triangle.

Material examined: DR CONGO: 1? Mukana, 9°15'S 27°12'E, 14.iv.1947; 1♀ Kasende, vii.1934; MOZAMBIQUE: 1♀ Maputo, 25°57'S 32°34'E, iv.–vii.1914; RWANDA: 2♂♂ Kibungu, 2°10'S 30°32'E, 2.ii.1953. Depository: BMNH, ISNB, MRAC.

Euscelidia glabra sp. n.

Figs 37, 47

Etymology: Latin adjective *glaber* = hairless; refers to the apruinose, bare scutum.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose sct, the few microtrichia on the wings, and features of the ♂ terminalia (shape of aed).

Description: *Head:* Black; fc yellow pruinose, fc gib distinct, mystax white, many macrosetae; prob and plp brownish-black, setae white; oc tr apruinose; occ silver pruinose, setae white; *Antennae* - scp brown, brown setae ventrally; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel brown.

Thorax: Black; ppro peg small, distinct, silver pruinose; sct bluish-black, predominantly apruinose, margins silver pruinose, white setae antero-laterally and on margins, presut and psut dc setae present; macrosetae: white, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s long, white; *Legs* - yellow to brown; pro fem yellow, meso fem yellow proximally, remaining part brown, meta fem in proximal half pale yellow, clubbed, club brown, setae white; tib yellow proximally, brown in remaining part, pale yellow stripe not reaching tip on meta tib anteriorly; tar brown, black setae; emp short, about a fifth of length of clw; *Wings* - hyaline, but microtrichia evenly scattered on remigium and distal margin; ptero distinct, brown; cell d terminating in 3 veins; hlt light brown.

Abdomen: Black; T predominantly brown pruinose, anterior margin grey pruinose laterally, posterior margin grey pruinose, T2 in proximal half with apruinose spot, T1 with long white setae laterally, T2 in proximal half with white setae laterally, remaining T with white and yellow setae, S grey pruinose; ♂ *terminalia* Fig. 37 - sur pointed distally, lobe ventrally; hypd bent upwards, pointed distally; d aed shea short, blunt, paired appendage developed ventrally; lat apod simple.

Type material - The ♂ holotype is labelled 'S. India: Karnataka. Gersoppa (Jog Falls) 19–24.xi.1977 c. 600 m Zool. Mus. Copenhagen Exp. / HOLOTYPE *Euscelidia glabra* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is directly mounted, is in excellent condition, and is deposited in the ZMUC.
17♀♀ 9♂♂ paratypes have same labels as holotype except 'PARATYPE *Euscelidia glabra* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimens are either directly mounted or double mounted (minuten in block of foam), are in good to excellent condition, and are deposited in the ZMUC.

Type locality and distribution (Fig. 47): India, Karnataka Province, Gersoppa, 14°15'N 74°39'E. India.

Euscelidia gutianensis Shi, 1995

Euscelidia gutianensis Shi, 1995: 228.

Type material - The ♀ holotype is deposited in the IZAS. The specimen has not been examined.

Type locality: China, Zhejiang Province, Mt. Gutian, 29°18'N 118°12'E.

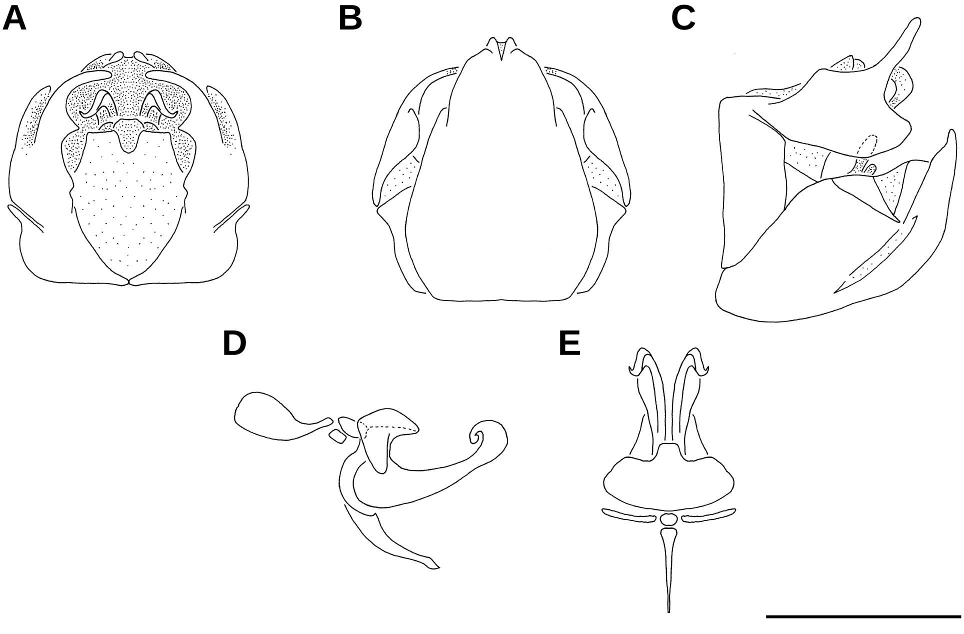

Fig. 37. ♂ terminalia of *Euscelidia glabra* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. E. Aedeagus dorsal. Scale line = 1 mm.

Remarks: Two features given in the short English description might be useful to distinguish the species from others. These are (1) ‘scutum yellow with 3 black longitudinal stripes dorsally’ and (2) ‘hind femora with wide black ring near apex’. I have not examined material of this species and therefore no further comments about this species can be made. The type locality is plotted in Fig. 1.

Euscelidia hesperia sp. n.

Figs 29, 38

Etymology: Latin adjective *hesperius* = western; refers to the distribution in western Africa.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose sct, the distinct alveoli on the sct, and the densely arranged microtrichia on the wings.

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brown-black, setae white; oc tr white pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp dark brown, brown setae ventrally, white pruinose; ped dark brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose proximally and ventrally; apsel brown.

Thorax: Black; ppro peg small, distinct, silver pruinose; sct predominantly apruinose, grey pruinosity restricted to anterior, lateral, and posterior margins, yellow setae with distinct alveoli scattered on surface, leaving 2 narrow, median longitudinal stripes, fused distally and not reaching posterior margin, and 2 lateral spots, uncovered; macrosetae reduced (holotype with only 1 brown spal s); sctl yellow pruinose, ds sctl s and sctl s long, yellow; *Legs* - yellow to brown; pro and meso fem light brown, brown on distal tip, meta fem pale yellow proximally, light brown distally, slightly clubbed; pro and meso tib brown, pale yellow stripe not reaching tip anteriorly, meta tib yellow in proximal half, distal half brown; first tar yellow, brown distad, remaining tar brown, setae black; emp very short, distinct; *Wings* - few microtrichia in proximal half, cell d with only few microtrichia along margins, densely covered with microtrichia in distal half, brown stained along veins; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; T2–3 grey pruinose, T4–8 brown pruinose medially, anterior, lateral, and posterior margins grey pruinose, T2 anteriorly with apruinose spot, T1 with long white setae laterally, T2 in proximal third with white setae laterally, remaining T with short white and yellow setae, S grey pruinose; ♂ *terminalia* Fig. 38 - sur pointed distally, lobe dorsally and ventrally; hypd bent upwards; d aed shea tubular, medium length, v aed shea forming a plate; lat apod bifurcated.

Type material - The ♂ holotype is labelled ‘W-Africa: Gambia: ca. 29–33 km W’ Soma: Tendaba-Batelling BARKEMEYER 30.9.1987 (‘30.9.’ handwritten) Wegesrand (Felder, Gebüsch u.a.) (handwritten on backside of label) / HOLOTYPUS *Euscelidia hesperia* sp. nov. det. T. Dikow 2001 (red label)’. The specimen is double mounted (minuten in block of foam), is in relatively good condition (right meta leg broken and specimen greasy; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the NMSA.

A ♀ paratype is labelled ‘W-Africa: Gambia: Banjul: Bund Road (SE-Bereich) BARKEMEYER 25.9.1987 (‘25.9.’ handwritten) / PARATYPE *Euscelidia hesperia*

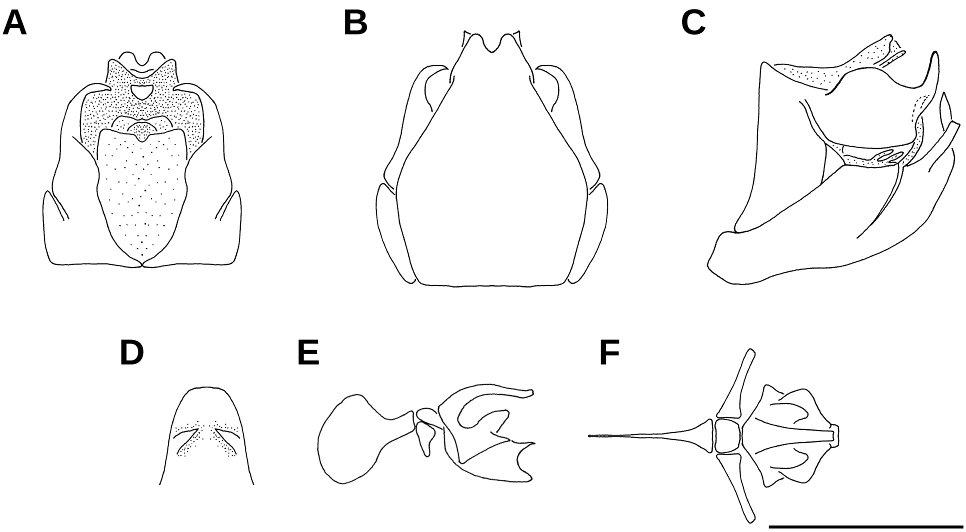

Fig. 38. ♂ terminalia of *Euscelidia hesperia* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Hypandrium posterior. E. Aedeagus lateral. F. Aedeagus dorsal. Scale line = 1 mm.

sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is double mounted (minuten in block of foam), is in very good condition, and is deposited in the NMSA. A ♀ paratype is labelled 'W-Africa: Gambia: ca. 30 km W' Soma: Duntu Malang Bolon (N' Gambia River) BARKEMEYER 28.9.1987 ('28.9.' handwritten) aufgegebene Felder bei verlassenem Dorf, z.T. feucht (handwritten on backside of label) / PARATYPE *Euscelidia hesperia* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is double mounted (minuten in block of foam), is in good condition (left pped broken), and is deposited in the NMSA.

Type locality and distribution (Fig. 29): The Gambia, Tendaba, 13°26'N 15°49'W. The Gambia, Senegal.

Material examined: SENEGAL: 4♀♀ Tambacounda, 13°45'N 13°40'W, 6.ix.1979 [all specimens greasy]. Depository: MRAC.

Euscelidia hyalina sp. n.

Figs 39, 50

Etymology: Latin adjective *hyalinus* = transparent; refers to the hyaline wings.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose sct, the apruinose T8 in the ♀♀, the brown coloration of the whole insect, and features of the ♂ terminalia (sur with dorsal and ventral lobe, hypd bent upwards and divided into two lobes, d aed shea short, blunt).

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, 6–7 macrosetae; prob and plp brownish-black, white setae; oc tr silver pruinose dorsally; occ silver pruinose, white and yellowish setae; *Antennae* - scp brown, brown setae ventrally; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel brown.

Thorax: Brown; ppro peg large, silver pruinose; sct brown, 3 dark brown longitudinal stripes, median stripe divided at anterior margin, lateral stripes originating medially (stripes fused distad in ♂ holotype), apruinose, margins silver pruinose, white setae on pruinose area, some white setae scattered on surface; macrosetae: 1 white or black npl s, 1 black spal s; sctl silver pruinose, ds sctl s and sctl s long, brown; *Legs* - yellow to brown; pro and meso fem light brown, meta fem pale yellow proximally, clubbed, club brown, setae white; tib brown, pale yellow stripe not reaching tip on meta tib anteriorly; first tar proximally pale yellow, brown distad, remaining tar light brown with brown tip, black setae; emp minute; *Wings* - hyaline, very few microtrichia on remigium; ptero distinct, brown; cell d terminating in 3 veins; hlt light brown.

Abdomen: Brown; T1 grey pruinose, T2–5 in proximal half apruinose, distal half brown pruinose, margins grey pruinose, remaining T brown pruinose, anterior and posterior margins grey pruinose, T8 in ♀ apruinose, T1 with long brown setae laterally, T2 in proximal half with white setae laterally, remaining T with white setae, S2 apruinose, remaining S grey pruinose; ♂ *terminalia* Fig. 39 - sur pointed distally, lobe dorsally and ventrally; hypd bent upwards, divided into 2 lobes; d aed shea short, blunt; lat apod simple.

Type material - The ♂ holotype and ♀ paratype are labelled '7 II 1966 [7.ii.1966] OULI BANGALA Logone, Tchad 195 Coll. J.C. Hitchcock, Jr. ('7 II' and '195' handwritten) / IN COPULA (handwritten) / HOLOTYPE ♂; PARATYPE ♀ *Euscelidia hyalina* sp. nov. det. T. Dikow 2001 (red label)'. The specimens are double mounted (minuten in block of cork, ♂ specimen above ♀), are in good condition (♂ left meta leg and left wing broken, abdomen broken (attached to block of cork), ♂ terminalia attached to specimens pin in micro vial; ♀ right pped broken), and are deposited in the USNM.

Type locality and distribution (Fig. 50): Chad, Ouli Bangala, 7°49'N 15°49'E. Chad.

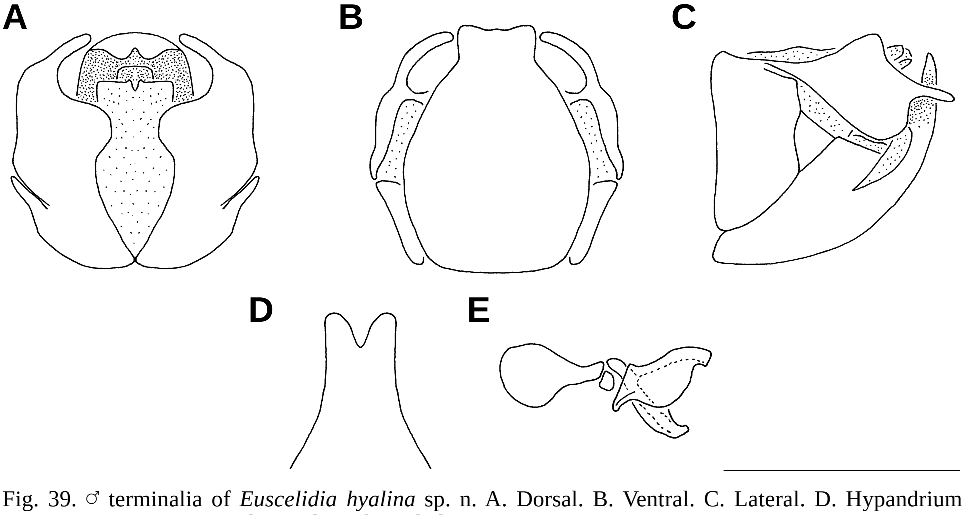

Fig. 39. ♂ terminalia of *Euscelidia hyalina* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Hypandrium posterior. E. Aedeagus lateral. Scale line = 1 mm.

Euscelidia insolita sp. n.

Figs 40, 41

Etymology: Latin adjective *insolitus* = unusual, uncommon, odd; refers to the unusual shape of the aedeagus.

Diagnosis: The species is distinguished from congeners by the large size, predominantly apruinose sct, and features of the ♂ terminalia (d aed shea Fig. 40).

Description: *Head:* Black; fc yellow pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brown, setae white; oc tr pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp brown, white setae ventrally, white pruinose; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel brown.

Thorax: Black; ppro peg large, silver pruinose; sct predominantly apruinose, yellow pruinosity restricted to anterior, lateral, and posterior margins, yellow setae on pruinose area, few scattered on apruinose part; macrosetae: 1 white npl s, 1 white or black spal s; sctl silver pruinose, ds sctl s and sctl s long, yellow; *Legs* - yellow to brown; fem light brown, meta fem pale yellow proximally, clubbed, club with brown lateral stripe; tib light brown, brown stripe dorsally, pale yellow stripe not reaching tip anteriorly; first tar yellow, brown distad, remaining tar brown, setae black; emp about a quarter of length of clw; *Wings* - densely covered with microtrichia, brown stained, veins brown; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; grey pruinose, distal T more brown pruinose dorsally, T1 with long yellow setae laterally, T2 in proximal half with white setae laterally, remaining T with short white and yellow setae, S grey pruinose; ♂ *terminalia* Fig. 40 - sur pointed distally, lobe ventrally; hypd ventral margin straight; d aed shea proximally plate-like, distally with 4 lateral narrow lobes, dorsally with separate structure covering ductus ejaculatorius, medium length; lat apod bifurcated.

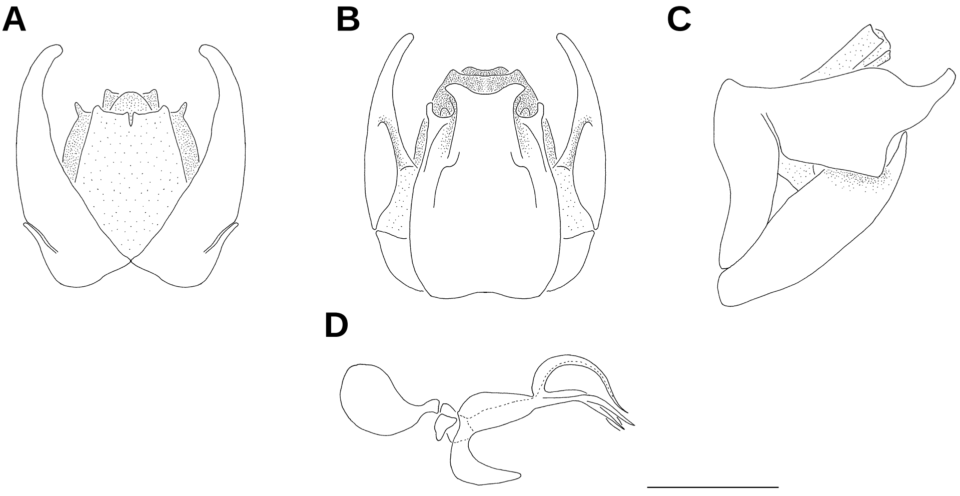

Fig. 40. ♂ terminalia of *Euscelidia insolita* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. Scale line = 1 mm.

Type material - The ♂ holotype is labelled 'Elisabethville [Lubumbashi] Congo Belge Dr, M. Bequaert 20-I-35 [20.i.1935] (date handwritten on backside of label) / R.I.Sc.N.B. 24.236 Coll. M. Bequaert / E. Janssens det., 1955 *Euscelidia Datis* Walker (handwritten except for 'E. Janssens det., 195') / HOLOTYPE *Euscelidia insolita* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is directly mounted, is in very good condition (right meta leg broken; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the ISNB.

Two ♀ paratypes are labelled 'Elisabethville [Lubumbashi] Congo Belge Dr, M. Bequaert 20-I-35 [20.i.1935] (respectively mars 1934 [Mar 1934]) (date handwritten on backside of label) / R.I.Sc.N.B. 24.236 Coll. M. Bequaert / PARATYPE *Euscelidia insolita* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimens are directly mounted, are in good condition (1 specimen with left meta leg broken; 1 specimen with right meta leg and abdomen broken that is attached to specimens pin on piece of cardboard), and are deposited in the ISNB.

Type locality and distribution (Fig. 41): DR Congo, Lubumbashi (former Elisabethville), 11°39'S 27°28'E. DR Congo.

Euscelidia kasungu sp. n.

Figs 41, 42

Etymology: Noun in apposition that refers to the type locality Kasungu, Malawi.

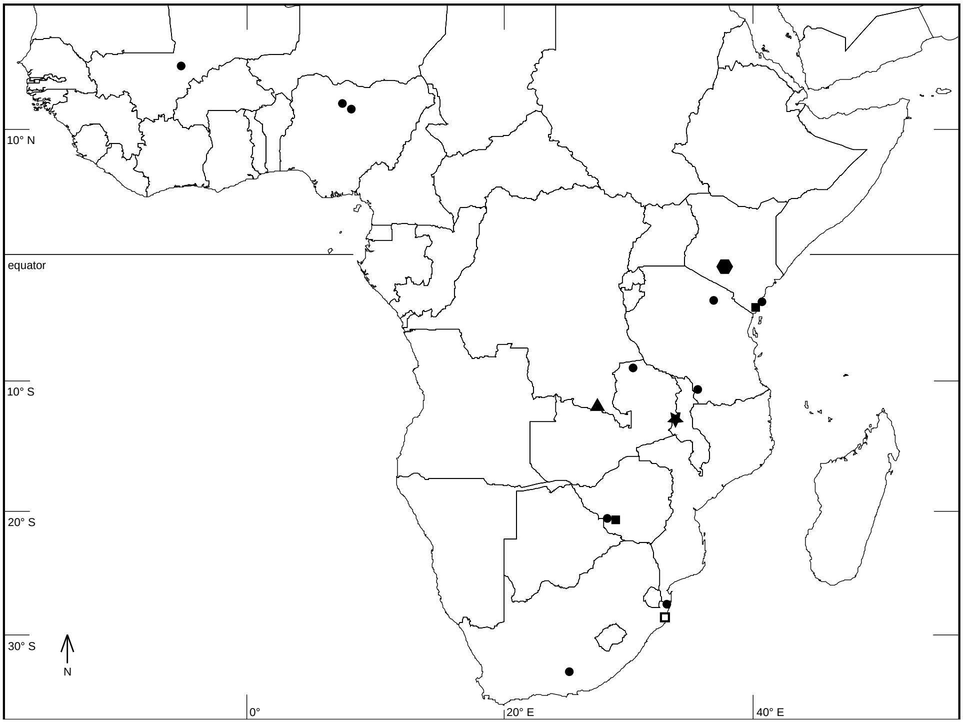

Fig. 41. Distribution. *Euscelidia insolita* sp. n., triangle; *E. kasungu* sp. n., star; *E. mucronata* sp. n., hexagon; *E. valida*, circles; *E. venusta* sp. n., squares.

Diagnosis: The species is distinguished from congeners by the grey and brown pruinosity on the sct, the densely arranged microtrichia on the wings, and the pale yellow (proximal half) and brown (distal half) meta fem.

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brownish-black, setae white; oc tr apruinose; occ silver pruinose, setae white; *Antennae* - scp brown, brown setae ventrally; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel brown.

Thorax: Black; ppro peg large, silver pruinose; sct predominantly yellow pruinose, margins silver pruinose, 2 narrow median stripes, originating at anterior margin, and 2 lateral spots, not reaching anterior and posterior margins, apruinose, short yellow setae medially, white setae on margins; macrosetae: 1 white npl s, 1 black spal s; sctl silver pruinose, ds sctl s and sctl s short, white; *Legs* - yellow and dark brown; pro fem in proximal 2/3 yellow, distal third brown, meso fem in proximal third yellow, distal 2/3 brown, meta fem in proximal half pale yellow, clubbed, club brown, setae white; tib brown and dark brown, pale yellow stripe not reaching tip on meta tib anteriorly; first tar in proximal 2/3 pale yellow, brown distad, remaining tar brown, black setae; emp distinct, very short; *Wings* - cells c, sc, br, and bm with few microtrichia, remaining cells densely covered with microtrichia, less microtrichia along veins, brown stained; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; T brown pruinose, grey pruinose laterally, T1 with long white setae laterally, T2 medially with white setae, remaining T with white and brown setae, S grey pruinose; ♂ *terminalia* Fig. 42 - sur pointed distally, lobe ventrally and slightly expanded dorsally; hypd bent upwards; d aed shea short, blunt; lat apod simple, slightly expanded proximally.

Type material - The ♂ holotype is labelled 'MALAWI SE1333BC 40 km S. of Kasungu 26.ii.1987 J & A Londt Grassy hillside with rocks and bushes / HOLOTYPE *Euscelidia kasungu* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is double mounted

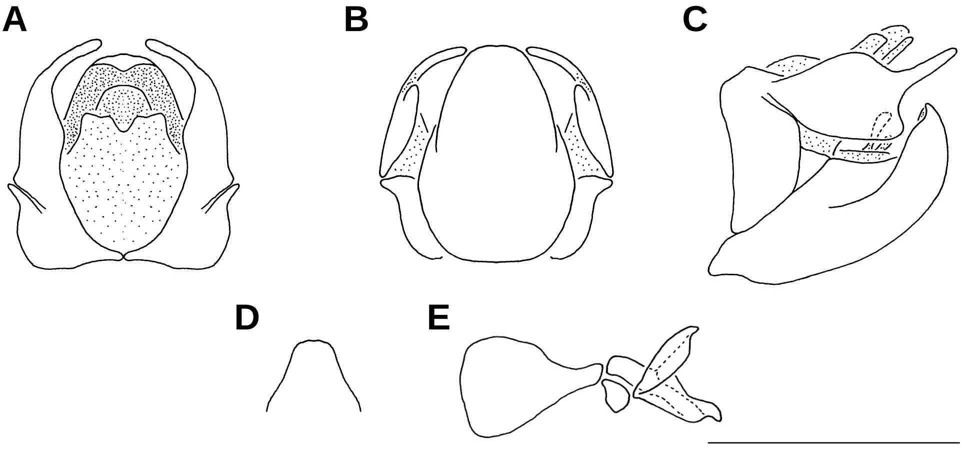

Fig. 42. ♂ terminalia of *Euscelidia kasungu* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Hypandrium posterior. E. Aedeagus lateral. Scale line = 1 mm.

(minuten in block of foam), is in excellent condition (♂ terminalia attached to specimens pin in micro vial), and is deposited in the NMSA.

A paratype of undeterminable gender has labels as holotype except ‘PARATYPE *Euscelidia kasungu* sp. nov. det. T. Dikow 2001 (yellow label)’. The specimen is double mounted (minuten in block of foam), is in good condition (abdomen broken from fifth segment), and is deposited in the NMSA.

Type locality and distribution (Fig. 41): Malawi, Kasungu (40 km S), 13°01'S 33°28'E (co-ordinates for Kasungu). Malawi.

Euscelidia lepida sp. n.

Figs 44A–D, 60

Etymology: Latin adjective *lepidus* = elegant, fine; refers to the beautiful, elegant appearance.

Diagnosis: The species is distinguished from congeners by the broad median apruinose stripe and lateral apruinose spots on the sct, the few microtrichia on the wings, and features of the ♂ terminalia (sur rounded distally, narrow ventral lobe situated proximally).

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, 6 macrosetae; prob and plp brown-black, setae white; oc tr white pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp dark brown, white setae ventrally, white pruinose; ped dark brown, brown distally, brown setae ventrally and dorsally, white pruinose; pped dark brown, brown proximally, white pruinose proximally and ventrally; apsel brown.

Thorax: Black; ppro peg small, distinct, silver pruinose; sct bluish-black, predominantly silver pruinose, median stripe, not reaching posterior margin, and 2 lateral spots, not reaching anterior and posterior margins, apruinose, white setae on margins; macrosetae: black, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s short, brown; *Legs* - yellow to brown; fem brown, setae white, meta fem clubbed; tib brown, yellow stripe not reaching tip on meta tib anteriorly; first tar yellow, brown distad, remaining tar brown, setae black; emp little longer than half the length of clw; *Wings* - hyaline, microtrichia on distal margin of cell r_1 to r_5; ptero distinct, brown; cell d terminating in 2 veins; hlt yellow.

Abdomen: Black; T grey pruinose, T1 with long white and brown setae laterally, T2 in proximal half with white setae laterally, remaining T with short white and yellow setae, S grey pruinose; ♂ *terminalia* Figs 44A–D - sur blunt, rounded distally, narrow ventral lobe proximally; hypd ventral margin straight; lat pr gonst triangular in lateral view; d aed shea short, pointed; lat apod simple.

Type material - The ♂ holotype is labelled ‘THAILAND: Chieng Mai Province, Doi Suthep, summit 1600 m 27.ix.1981 Zool. Museum Copenhagen leg. / HOLOTYPE *Euscelidia lepida* sp. nov. det, T. Dikow 2001 (red label).’ The specimen is deposited in the ZMUC.

Type locality and distribution (Fig. 60): Thailand, Chieng Mai Province, Doi Suthep, 18°48'N 98°55'E. Thailand.

Euscelidia livida sp. n.

Figs 43, 60

Etymology: Latin adjective *lividus* = black and blue; refers to the bluish-black colour of the scutum.

Diagnosis: The species is distinguished from congeners by the two large lateral apruinose bluish-black spots on the sct and features of the ♂ terminalia (sur with large lobe ventrally, lat apod bifurcated).

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brownish-black, setae white; oc tr apruinose; occ silver pruinose, setae white; *Antennae* (pped broken) - scp brown, brown setae ventrally; ped brown, brown setae ventrally and dorsally, white pruinose.

Thorax: Orange to black; ppro peg large, silver pruinose; sct bluish-black, anterolateral and lateral margins orange, yellow pruinose medially, margins silver pruinose, 2 median narrow longitudinal stripes, not reaching posterior margin, and 2 lateral spots, not reaching anterior and posterior margins, apruinose, few white and yellow setae on margins; macrosetae: black, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s short, white; *Legs* - yellow to brown; fem pale yellow proximally, light brown on remaining part, meta fem slightly clubbed, club brown; pro and meso tib light brown, pale yellow stripe anteriorly, meta tib yellow proximally, remaining part brown, pale yellow stripe not reaching tip anteriorly; first tar yellow proximally, brown distad, remaining tar brown, black setae; emp distinct, very short; *Wings* - hyaline, but microtrichia on distal margin, slightly browned stained; ptero distinct, brown; cell d terminating in 2 veins; hlt yellow.

Abdomen: Brown; T predominantly brown pruinose, grey pruinose laterally, T1 with long brown setae laterally, T2 in proximal half with few white setae laterally, remaining T with yellow setae, S grey pruinose; ♂ *terminalia* Fig. 43 - sur pointed distally, large lobe ventrally; hypd ventral margin straight; d aed shea tubular, medium length; lat apod bifurcated.

Type material - The ♂ holotype is labelled ‘Toungoo, Karenni 3000’ [3000 ft = 900 m]. Burma IV.14. [iv.1914] Michelitz / HOLOTYPE *Euscelidia livida* sp. nov. det. T. Dikow 2001 (red label)’. The specimen is double mounted (minuten in rectangular piece of cardboard), is in very good condition (pped broken; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the ZMHB.

Type locality and distribution (Fig. 60): Myanmar, Toungoo, 18°56'N 96°25'E. Myanmar.

Euscelidia longibifida sp. n.

Figs 6C, D, 7F, 8A, 14, 44E–I

Etymology: Latin adjectives *longus* = long and *bifidus* = bifurcated; refers to the long lateral processes on the dorsal aedeagal sheath.

Diagnosis: The species is distinguished from congeners by the yellow to brown pruinosity on the sct, the densely arranged microtrichia on the wings, and features of the ♂ terminalia (d aed shea, long lat pr aed).

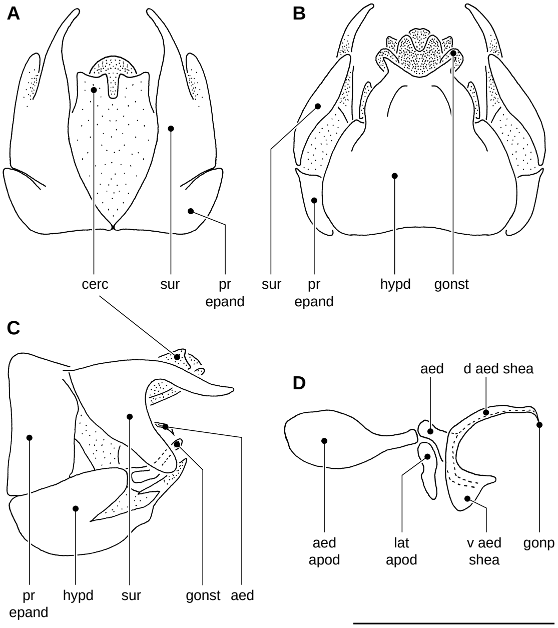
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Fig. 43. ♂ terminalia of *Euscelidia livida* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. Scale line = 1 mm.

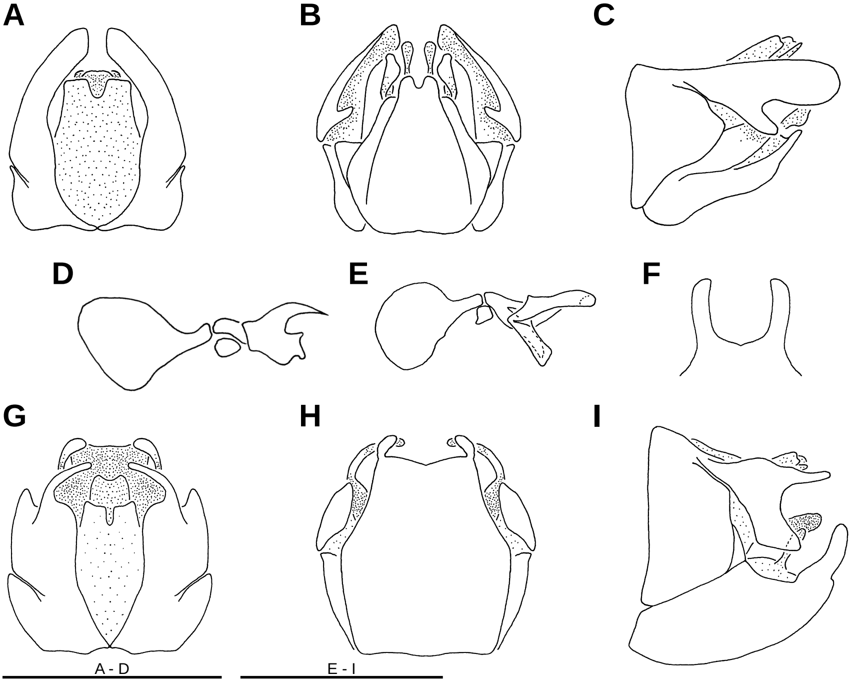
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Fig. 44. ♂ terminalia. A–D. *Euscelidia lepida* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. E–I. *E. longibifida* sp. n. E. Aedeagus lateral. F. Hypandrium posterior. G. Dorsal. H. Ventral. I. Lateral. Scale lines = 1 mm.

Description: *Head:* Black; fc yellow pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp dark brown, setae white; oc tr brown pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp brown, black setae ventrally, white pruinose; ped light brown, brown setae ventrally and white setae dorsally, white pruinose; pped light brown, white pruinose proximally and ventrally; apsel brown.

Thorax: Black; ppro peg large, silver pruinose; sct predominantly brown pruinose, margins silver pruinose, a lateral presut and a lateral psut spot may be apruinose, presut and psut dc s short, white setae on margins; macrosetae: white, 1 npl s, 1 spal s; sctl white pruinose, sctl ds and sctl s long, white; *Legs* - yellow to brown; fem yellow, white setae, meta fem pale yellow proximally, clubbed, club anteriorly light brown, setae short, white; pro and meso tib yellow, light brown dorsally, meta tib yellow proximally, brown distally, pale yellow stripe not reaching tip anteriorly; first tar yellow, brown distad, remaining tar brown, setae black; emp minute; *Wings* - densely covered with microtrichia; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; T predominantly brown pruinose, anterior and posterior margins narrowly grey pruinose, T2 with grey pruinose ring medially, T1 with long white setae laterally, T2 in proximal third with white setae laterally, remaining T with short white and brown setae, S grey pruinose; ♂ *terminalia* Figs 44E–I - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 separated lobes; d aed shea short, lat pr aed long, extending gonp; lat apod simple.

Type material - The ♂ holotype is labelled ‘SOUTH AFRICA 2427BA Transv. [Transvaal] Bulge River 30.I.1978 JGH. Londt Open grassveld area / HOLOTYPE *Euscelidia longibifida* sp. nov. det. T. Dikow 2001 (red label)’. The specimen is double mounted (minuten in rectangular piece of cardboard), is in excellent condition, and is deposited in the NMSA.

The 6♀♀ 5♂♂ paratypes have same labels as holotype except ‘PARATYPE *Euscelidia longibifida* sp. nov. det. T. Dikow 2001 (yellow label)’. The specimens are double mounted (minuten in rectangular piece of cardboard), are in good to very good condition, and are deposited in the NMSA.

Type locality and distribution (Fig. 14): South Africa, Northern Province, Bulge River, 24°06'S 27°41'E. Mozambique, South Africa.

Material examined: MOZAMBIQUE: 1♂ Henrique, 15°18'S 39°58'E, 15.xii.; SOUTH AFRICA: *KwaZulu-Natal:* 1? Kube Yini Game Reserve, 27°28'S 32°14'E, 10–14.i.1994; 2♀♀ 1♂ 3?? Mfongosi, 27°17'S 32°09'E, iii.1914, ii., iii.1917; 1♀ Weenen, 28°51'S 30°05'E, i.1924; 1♂ 1? Ashburton, 29°38'S 30°24'E, 2.i.1989; 1♂ 1? Mackston, 30°01'S 30°18'E, iv.1977; *Northern Prov:* 5♀♀ 2♂♂ Potgietersrus, 24°15'S 28°58'E, 28.i.1978; 5♀♀ 2♂♂ Northam, 24°56'S 27°15'E, 1.xi.1978; 1♂ Warmbaths, 24°52'S 28°17'E, 1.xi.1978; 1♀ Thabazimbi, 24°35'S 27°24'E, 1.xi.1978; *North-West Prov:* 3♀♀ 4♂♂ Brits, 2527DA, 2.iii.1978. Depository: BMNH, NMSA.

Euscelidia lucida Oldroyd, 1939

Figs 45A–D, 46

Euscelidia lucida Oldroyd, 1939: 28; Hull 1962: 305; Oldroyd 1980: 356.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose sct and features of the ♂ terminalia (Figs 45A–D).

Redescription: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, 5–8 macrosetae; oc tr white pruinose dorsally; occ yellow pruinose, few white setae; *Antennae* - scp and ped light brown, setae brown; pped yellow, white pruinose; apsel hyaline; *Thorax:* Orange to brown; sct brown, predominantly yellow pruinose, a median longitudinal stripe, not reaching posterior margin, and 2 lateral longitudinal stripes, not reaching anterior margin, apruinose, surface of stripes black darkened, lateral and posterior margins with few yellow setae, macrosetae: black, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl long, yellow; *Legs* - yellow and light brown; pro and meso fem light brown, proximal half yellow posteriorly, meta fem pale yellow proximally, light brown, slightly clubbed, club with brown stripe laterally, setae white; tib light brown, yellow stripe not reaching tip on meta tib anteriorly; emp distinct, very short (emp longer in holotype); *Wings* - hyaline, some microtrichia distad; ptero distinct, brown; cell d terminating in 2 veins; hlt yellow with brown knob; *Abdomen:* Brown; T predominantly brown pruinose, apruinose spot on T2–5 anteriorly, posterior margin grey pruinose, T1 with brown setae laterally, T2 with few white setae laterally, remaining T with short yellow setae, S grey pruinose; ♂ *terminalia* Figs 45A–D - sur pointed distally, lobe dorsally and ventrally, dorsal lobe larger and pointed; hypd bent upwards; d aed shea short, blunt; lat apod simple.

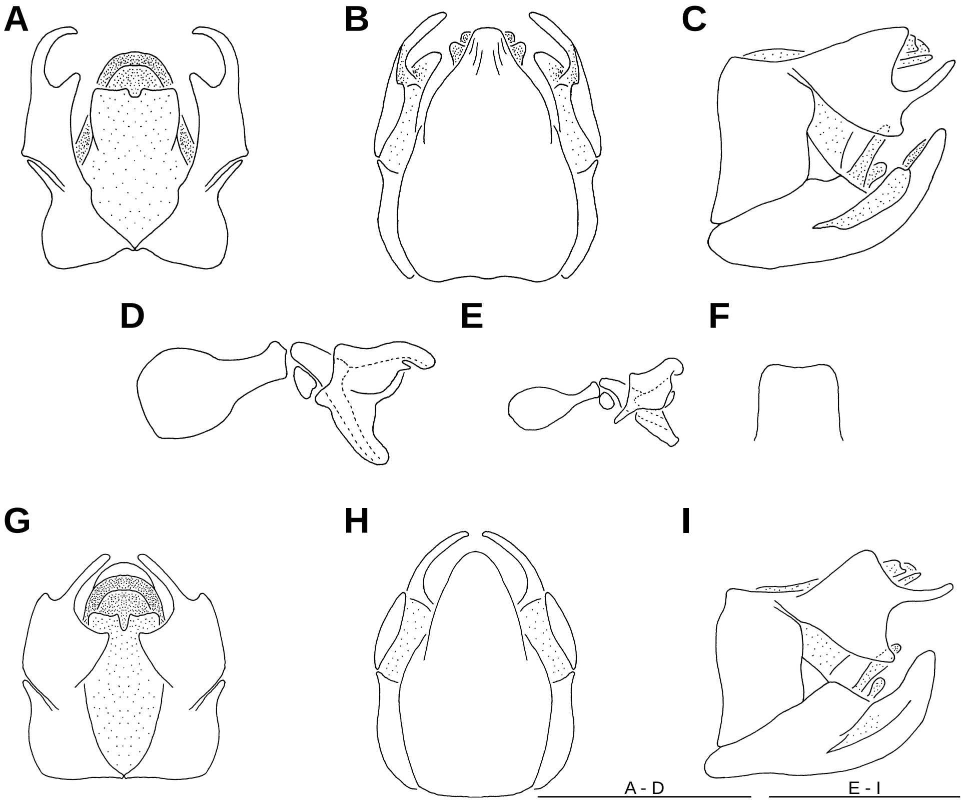

Fig. 45. ♂ terminalia. A–D. *Euscelidia lucida*. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. E–I. *E. lucioides* sp. n. E. Aedeagus lateral. F. Hypandrium posterior. G. Dorsal. H. Ventral. I. Lateral. Scale lines = 1 mm.

Type material - The ♂ holotype is labelled 'Type ♂ (circular label with red submarginal border) *Euscelidia lucida* Oldr. (on backside) / Namwamba Valley. 6,500 ft. [1950 m] F. Edwards. / UGANDA: Ruwenzori Range. xii.1934–i.1935. B.M.E. Afr. Exp. [British Museum East Africa Expedition] B.M. 1935-203 / *Euscelidia lucida* sp. nov. H. Oldroyd, det. 1938. (species name handwritten) / HOLOTYPE *Euscelidia lucida* Oldroyd det. J.E. Chainey 1982 (handwritten) Holotype (circular label with red border, attached to the other label)'. The specimen is double mounted (minuten in rectangular piece of plastic), is in good condition (abdomen broken (♂ terminalia were attached to piece of plastic); ♂ terminalia attached to specimens pin in micro vial), and is deposited in the BMNH.

Type locality and distribution (Fig. 46): Uganda, Ruwenzori Range, Namwamba Valley, 0°05'N 30°10'E. DR Congo, Nigeria, Uganda.

Material examined: DR CONGO: 1♀ Virunga National Park, Tshiaberimu, 0°08'S 29°25'E, 29.iii.1954; NIGERIA: 1♀ Ngel Nyaki, 7°04'N 11°03'E, 28.xi.–3.xii.1968. Depository: BMNH, MRAC.

Euscelidia lucioides sp. n.

Figs 45E–I, 46

Etymology: Refers to the similarity of this species to *lucida*.

Diagnosis: The species is distinguished from congeners by the predominantly grey pruinose sct, a brown apruinose median stripe and two apruinose lateral stripes on the sct, and features of the ♂ terminalia.

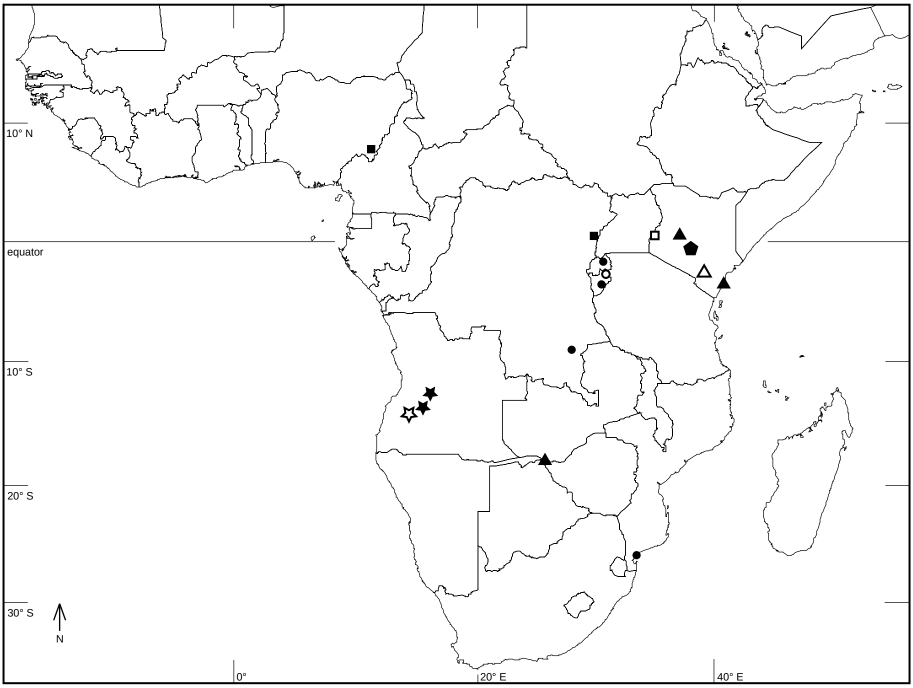

Fig. 46. Distribution. *Euscelidia cacula* sp. n., stars; *E. francoisi*, circles; *E. lucida*, squares; *E. lucioides* sp. n., pentagon; *E. tsavo* sp. n., triangles.

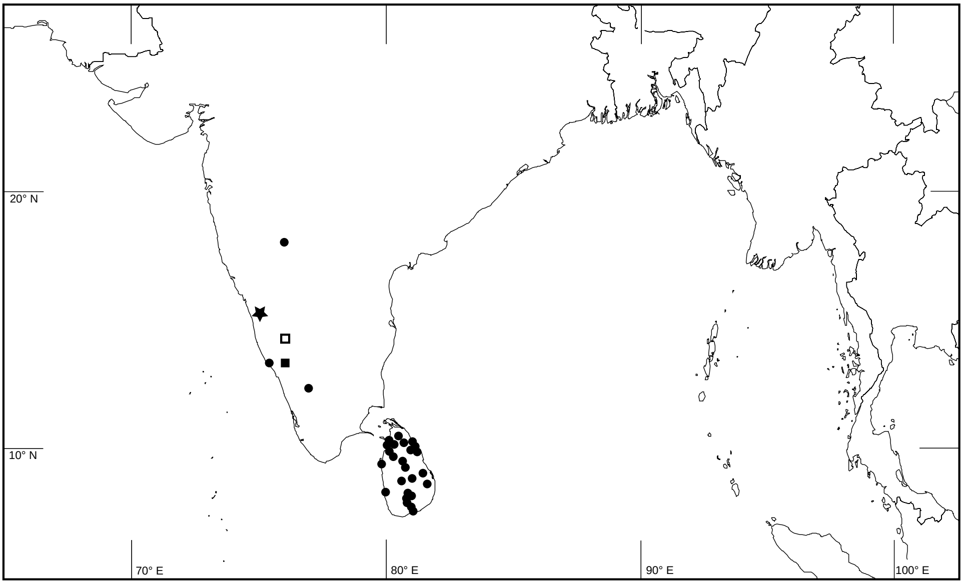

Fig. 47. Distribution. *Euscelidia abbreviata* sp. n., squares; *E. glabra* sp. n., star; *E. marion*, circles.

Description: *Head:* Black; fc silver pruinose (in upper half more yellow pruinose), fc gib indistinct, mystax white, 6–8 macrosetae; prob and plp brown, setae white; oc tr white pruinose dorsally; occ silver pruinose, few white and yellowish setae; *Antennae* - scp yellow, white setae ventrally, white pruinose; ped yellow, brown setae ventrally and dorsally, white pruinose; pped yellow, brown distad, white pruinose; apsel brown.

Thorax: Brown; ppro peg small, distinct, silver pruinose; sct predominantly yellow pruinose, 3 apruinose longitudinal stripes, median stripe not reaching posterior margin, lateral ones not reaching anterior and posterior margins, yellow setae on margins; macrosetae: brown, 1 npl s, 1 spal s; sctl white pruinose, ds sctl s and sctl s long, light brown; *Legs* - yellow to brown; fem light brown, yellow proximally, meta fem slightly clubbed; pro and meso tib light brown, pale yellow stripe anteriorly, meta tib brown, pale yellow stripe not reaching tip anteriorly; tar light brown, brown distad, black setae; emp minute; *Wings* - hyaline, few microtrichia scattered on remigium and on distal margin, slightly brown stained; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Brown; T predominantly brown pruinose, anterior and posterior margins narrowly grey pruinose, T2 with apruinose spot medially, T3 with apruinose spot proximally, T1 with long brown setae laterally, T2 in proximal half with white setae laterally, remaining T with white to brown setae, S grey pruinose, S2 in proximal half apruinose; ♂ *terminalia* Figs 45E–I - sur pointed distally, lobe dorsally and ventrally; hypd bent upwards; d aed shea short, blunt; lat apod simple.

Type material - The ♂ holotype is labelled ‘KENYA, Ngong Forestry Station 1–7 Feb. 1968 [1–7.ii.1962] Malaise trap Krombein & Spangler / HOLOTYPE *Euscelidia lucioides* sp. nov. det. T. Dikow 2001 (red label)’. The specimen is directly mounted, is in excellent condition (many Lepidoptera scales on specimen), and is deposited in the USNM.

The 2♀♀ 2♂♂ paratypes are labelled ‘KENYA, Ngong Forestry Station 13–18 Jan. [1♂] 27–31 Jan. [2♀♀] 1–7 Feb. 1968 [1♂] Malaise trap Krombein & Spangler / PARATYPE *Euscelidia lucioides* sp. nov. det. T. Dikow 2001 (yellow label)’. The specimens are directly mounted, are in very good to excellent condition (many Lepidoptera scales on specimens), and are deposited in the USNM.

Type locality and distribution (Fig. 46): Kenya, Ngong, 1°21'S 36°39'E. Kenya.

Remarks: The species is very similar to *lucida*. Some features of the ♂ terminalia (shape of sur and aed) as well as the shorter empodium, however, support my decision in describing it as a different species.

Euscelidia marion (Walker, 1849)

Figs 47, 48A–E

Leptogaster marion Walker, 1849: 484; Hull 1962: 300.
Euscelidia marion, Martin 1965: 112; Oldroyd 1975: 100; Joseph & Parui 1983: 278 1990: 10 1998: 18.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose sct, the densely arranged microtrichia on the wings, and the grey and brown pattern of pruinosity on the abdominal tergites.

Redescription: *Head:* Black; fc yellow pruinose, fc gib indistinct, mystax white, many macrosetae; oc tr white pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp brown, white setae ventrally; ped brown, white or brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel hyaline; *Thorax:* Black; sct predominantly apruinose, margins silver pruinose, many white and yellow setae scattered on surface, macrosetae: black, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s long, yellow; *Legs* - yellow to brown; pro and meso fem yellow proximally, brown distad, meta fem pale yellow proximally, distal half clubbed, brown and orange; pro and meso tib brown, yellow stripe anteriorly, meta tib yellow proximally, remaining part brown, pale yellow stripe not reaching tip anteriorly; emp minute; *Wings* - densely covered with microtrichia, cell c, sc, proximal half of r_1, and br dark brown, remaining cells light brown; ptero distinct, brown; cell d terminating in 2 veins; hlt yellow; *Abdomen:* Brown; T predominantly brown pruinose, anterior and posterior margins grey pruinose, T1 with black setae, T2 in proximal half with white setae laterally, remaining T with white or brown setae, S grey pruinose; ♂ *terminalia* Figs 48A–E - sur pointed distally, lobe ventrally; hypd bent upwards; d aed shea short, lat pr aed extending gonp; lat apod simple.

Type material - The lectotype of undeterminable gender, here designated to preserve stability and make more universal the use of this name, is labelled ‘Type (circular label with green submarginal border) / *Leptogaster marion* Walk. (handwritten) One of Walker’s series so named Edw. (on backside of label) / India N. Bengal cx. Coll. Miss Campbell 42 25 (handwritten) / 42 25 (handwritten) N Bengal (handwritten on backside of circular label) / Holotype *Leptogaster marion* Walker det. J.E. Chainey 1982 (handwritten) Holotype (circular label with red border, attached to the other label) / LECTOTYPE *Leptogaster marion* Walker, 1849 by T. Dikow 2001 (red label)’. The specimen is double mounted (minuten in rectangular piece of plastic), is in poor condition (antennae, right pro and meta legs, and left meta leg broken, sct cracked, abdomen broken from the third segment), and is deposited in the BMNH.

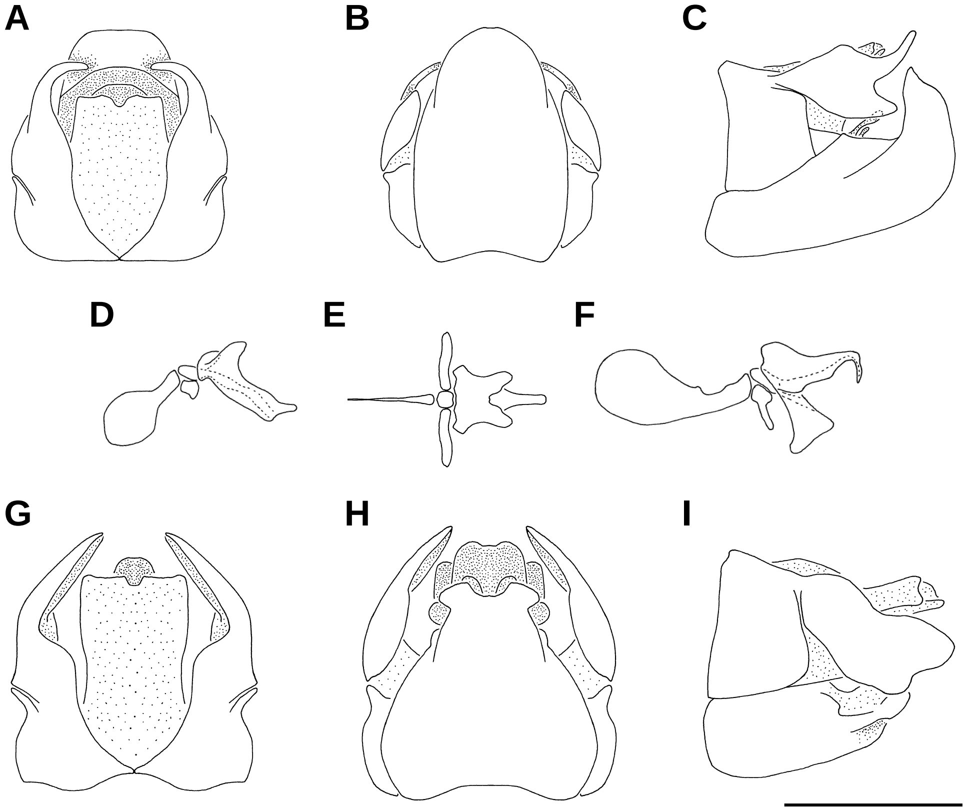

Fig. 48. ♂ terminalia. A–E. *Euscelidia marion*. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. E. Aedeagus dorsal. F–I. *E. moyoensis*. F. Aedeagus lateral. G. Dorsal. H. Ventral. I. Lateral. Scale line = 1 mm.

Type locality and distribution (Fig. 47): India, North Bengal, no exact locality data. India, Sri Lanka.

Material examined: INDIA: 1♀ Hadagali, 16°49'N 75°56'E, x.1911; 1♂ 1? Taliparamba, 12°01'N 75°21'E, 24–30.ix.1913; 1♀ Coimbatore, 11°01'N 76°55'E, 23–26.ix.1938; SRI LANKA: 1♂ 1? Mankulam, 9°07'N 80°26'E, 14.ii.1962; 2♂♂ Parayan Kulan, 8°56'N 80°00'E, 20-25.iii.1970, 10.iv.1981; 1♂ 1? Tiriyai, 8°52'N 81°00'E, 29.iii.1891; 7♀♀ 13♂♂ Padaviya Tank, 8°48'N 80°45'E, 18-19.v., 20-21.v.1976, 11-14.x.1977, 20-23.vii.1978; 2♀♀ 3♂♂ 1? Paraiyanalankulan, 8°46'N 80°10'E, 15.ii.1962; 1♀ Kondachchi, 8°43'N 79°58'E, 20.ix.1979; 2♀♀ Nilaveli, 8°41'N 81°11'E, 30.iii.1891; 1♀ Pankulam, 8°38'N 81°01'E, 13.iii.1891; 2♀♀ 2♂♂ Marichchukkaddi, 8°35'N 79°56'E, 26.i.1976; 4♀♀ Trincomalee, 8°34'N 81°13'E, 17.iii.1892, 9–10.ii.1962; 15♀♀ 15♂♂ China Bay, Trincomalee, 8°33'N 81°12'E, 13-17.v., 16-17.v.1976, 27-31.i., 8-11.x.1977, 26.ii.1979; 1♀ 7♂♂ 1? Wilpattu National Park, 8°25'N 80°00'E, 12-14.vi.1975, 21-25.v.1976, 22-23.i.1977, 15-16.ii.1979; 2♀♀ 4♂♂ Hunuwilagama, 8°18'N 80°08'E, 10-19.iii.1970, 22-26.v., 28.x.-3.xi.1976; 1♂ Ritigala Nature Reserve, 8°07'N 80°39'E, 24-25.ii.1979; 4♀♀ 2♂♂ 1? Puttalam, 8°02'N 79°49'E, 1.ii.1962; 1♂

Kibissa, 7°56'N 80°43'E, 28.vi.-4.vii.1978; 1? Maha Oya, 7°32'N 81°21'E, 1.v.1980; 1♀ 2♂♂ Hassalaka, 7°20'N 80°57'E, 16-19.ii.1977; 1♂ Kandy, 7°17'N 80°38'E, 26-30.vii.1978; 1♀ 1♂ Ekgal Aru Tank, 7°10'N 81°36'E, 9-11.vi.1976, 19-23.ii.1977; 1♀ Colombo, 6°55'N 79°51'E, ix.1903; 1♀ 1♂ Kalumullanda, 6°51'N 80°52'E, 3.iii.1962; 2♀♀ 1♂ Haldamulla, 6°46'N 80°52'E, 13.vi.1892; 1? Bandarawela, 6°49'N 80°58'E, 7.vi.1892; 1♂ Uda Walawe, 6°28'N 80°53'E, 1.viii.1973; 1♀ Mau Aru, 6°19'N 80°55'E, 17-19.vi.1978; 1♂ Hambantota, 6°07'N 81°07'E, 28.x.1970; 1♀ 2♂♂ Periakulam, 23.ii., 1.iii., 5.iv.1891; 4?? Mahaganay, 17.i., 8+15.ii.1892; 1♀ Iala, 9.ii.1909; 5♂♂ 2?? Klinochchi, 24-27.i.1977; COUNTRY UNKNOWN: 1♀ locality data not readable. Depository: BMNH, MZLU, USNM.

Euscelidia moyoensis Oldroyd, 1970

Figs 48F–I, 61

Euscelidia moyoensis Oldroyd, 1970: 222 1980: 357.

Diagnosis: The species is distinguished from congeners by the large size, the many yellow setae on the surface of the sct, and the densely arranged microtrichia on the wings. It is very similar to species of the *datis*-group, but the ♂ terminalia are distinctly different.

Redescription: *Head:* Black; fc yellow pruinose, fc gib distinct, mystax white, sometimes yellow, many macrosetae; oc tr yellow pruinose dorsally; occ silver pruinose, yellow setae dorsally and white setae laterally; *Antennae* - scp brown, setae white; ped brown, white setae ventrally and black setae dorsally; pped in proximal half light brown, distal half brown, white pruinose; apsel hyaline; *Thorax:* Black; sct bluish-black, predominantly apruinose, margins yellow pruinose, many yellow setae scattered on apruinose surface directing medially, yellow setae on pruinose part, macrosetae: white, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s long, yellow; *Legs* - yellow to brown; pro and meso fem yellow proximally, brown distad, meta fem yellow proximally, inner side brown medially, clubbed, club with white setae, especially developed ventrally; tib brown, yellow stripe not reaching tip anteriorly; emp distinct, very short; *Wings* - densely covered with microtrichia; ptero indistinct, brown; cell d terminating in 2 veins; hlt brown; *Abdomen:* Black; T yellow pruinose anteriorly, posterior margin brown pruinose, T1 with white setae, T2 with few white setae laterally, remaining T with short yellowish setae, S grey pruinose, S2 in proximal 3/4 apruinose; ♂ *terminalia* Figs 48F–I - sur distally only slightly pointed, lobe ventrally; hypd ventral margin straight; d aed shea laterally flattened, tip hook-shaped; lat apod bifurcated.

Type material - The ♂ holotype is labelled 'HOLOTYPUS (red label with black submarginal border) / Congo Belge, P. N. G. [Parc National Garamba] Miss H. De Saeger Mt. Moyo, 29-VII-52 [29.vii.1952] H. De Saeger. 3844 / *Euscelidia moyoensis* Oldr. det. H. Oldroyd 1966 HOLOTYPE (handwritten except for 'det. H. Oldroyd 19')'. The specimen is double mounted (minuten in block of foam), is in very good condition (antennae and left pro tarsus broken), and is deposited in the MRAC.

Type locality and distribution (Fig. 61): DR Congo, Garamba National Park, Mount Moyo, 4°06'N 29°27'E (co-ordinates for Garamba National Park). Burundi, Cameroon, DR Congo.

Material examined: BURUNDI: 2♂♂ Butetsi, 3°52'S 30°15'E, 27.v.1950, 20.vi.1952. CAMEROON: 6♀♀ 7♂♂ Bamenda, 5°55'N 10°10'E, 18+22.xi.1987. Depository: BMNH, ISNB, NMSA.

Euscelidia mucronata sp. n.

Figs 41, 49

Etymology: Latin adjective *mucronatus* = pointed; refers to the two pointed lobes on the distal margin of the hypandrium.

Diagnosis: The species is distinguished from congeners by the grey and brown pruinose sct, the lateral apruinose spots on the sct, and features of the ♂ terminalia (hypd bent upwards, divided into two pointed lobes).

Description: *Head:* Black; fc yellow pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brown, setae white; oc tr white pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp brown, brown setae ventrally, white pruinose; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown proximally, light brown distally, white pruinose; apsel brown.

Thorax: Black; ppro peg large, silver pruinose; sct predominantly yellow pruinose, margins silver pruinose, 2 apruinose presut spots and 2 triangular apruinose psut spots/stripes laterally, yellow setae on yellow pruinose and white setae on silver pruinose part; macrosetae: 1 white npl s, 1 black spal s; sctl silver pruinose, ds sctl s and sctl s short, white; *Legs* - yellow to brown; fem light brown, meta fem slightly clubbed, yellow proximally, club brown; pro and meso tib light brown, yellow stripe anteriorly, meta tib dark brown, pale yellow stripe not reaching tip anteriorly; first tar yellow proximally, brown distad, remaining tar brown, setae black; emp minute; *Wings* - hyaline, but microtrichia evenly scattered on remigium, cells br and bm with very few

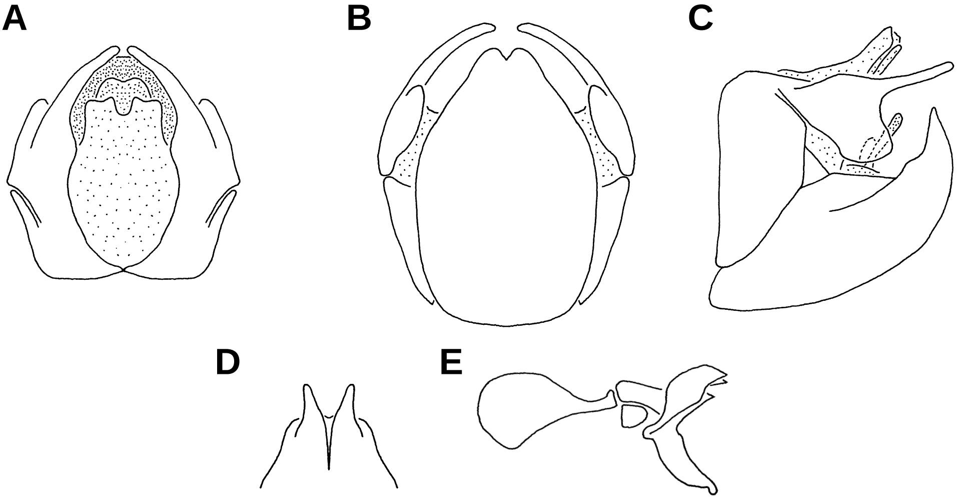

Fig. 49. ♂ terminalia of *Euscelidia mucronata* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Hypandrium posterior. E. Aedeagus lateral. Scale line = 1 mm.

microtrichia, slightly browned stained; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; T predominantly brown pruinose, anterior, lateral, and posterior margins grey pruinose, T1 with long brown setae laterally, T2 in proximal half with white setae laterally, remaining T with white and brown setae, S grey pruinose; ♂ *terminalia* Fig. 49 - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 pointed lobes; d aed shea short, blunt; lat apod simple.

Type material - The ♂ holotype is labelled 'Nairobi 5500 feet / KENYA: 9–13.xii.1970 A. E. Stubbs B.M. 1972-211 / HOLOTYPE *Euscelidia mucronata* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is double mounted (minuten in block of foam), is in very good condition (met tib broken; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the BMNH.

The ♂ paratype is labelled 'KENYA, Ngong Forestry Station 13–18 Jan. 1968 Malaise trap Krombein & Spangler / PARATYPE *Euscelidia mucronata* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is directly mounted, is in very good condition (antennae broken), and is deposited in the USNM.

Type locality and distribution (Fig. 41): Kenya, Nairobi, 1°16'S 36°48'E. Kenya.

Euscelidia nenemusha (Speiser, 1910), **comb. n.**

Fig. 50

Leptogaster nenemusha Speiser, 1910: 84; Hull 1962: 300; Oldroyd 1980: 358.

Diagnosis: The species is distinguished, together with *castanea* and *schoutedeni*, from congeners by the overall brown colour, the predominantly apruinose sct, and the apruinose T8 in the ♀♀.

Redescription: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, 11 macrosetae; oc tr white pruinose dorsally; occ yellow pruinose, few white setae; *Antennae* - scp light brown, setae light brown; ped and pped yellow, white pruinose; apsel light brown; *Thorax:* Brown; sct brown, apruinose, anterior, lateral, and posterior margins yellow pruinose, 2 black spots laterally, few yellow setae on surface, macrosetae: black, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl short, yellow; *Legs* - yellow to light brown; pro and meso fem brown anteriorly, yellow posteriorly, meta fem pale yellow proximally, brown dorsally, yellow ventrally, slightly clubbed, white setae; tib light brown, yellow stripe not reaching tip anteriorly; emp about a quarter of length of clw; *Wings* - hyaline, some microtrichia distally; ptero distinct, brown; cell d terminating in 2 veins; hlt yellow with brown knob; *Abdomen:* Brown, T white pruinose, T1 with black setae, S grey pruinose; ♂ *terminalia* - ♂♂ specimens unknown.

Type material - The ♀ holotype is labelled 'Meru 3,000–3,500 m (3,500' crossed out) / Sjöstedt. / jan. / Typus (red label with black submarginal border) / 11 52 (red label) / Type! *Leptogaster nenemusha* m P. Speiser det. (handwritten except for 'P. Speiser det.') / HOLOTYPE *Leptogaster nenemusha* Speiser, 1910 by T. Dikow 2001 (red label)'. The specimen is directly mounted, is in good condition, and is deposited in the NHRS.

Type locality and distribution (Fig. 50): Tanzania, Meru, 3°13'S 36°44'E. Tanzania.

Remarks: The species is only known from the female holotype. It is related to *castanea*

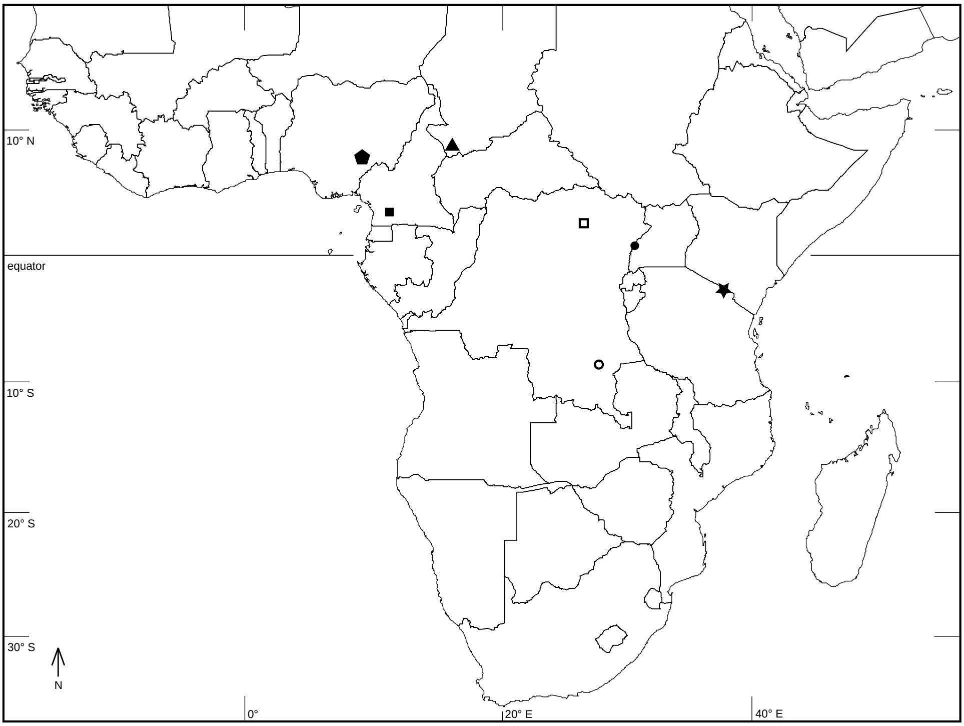

Fig. 50. Distribution. *Euscelidia castanea*, circles; *E. hyalina* sp. n., triangle; *E. nenemusha*, star; *E. obudu* sp. n., pentagon; *E. schoutedeni*, squares.

and *schoutedeni*, which are also only known from females. It is necessary to examine male specimens from the type localities of all three species to discuss a probable synonymy.

Euscelidia nitida (Wiedemann, 1828)

Figs 51A–D, 53

Leptogaster nitidus Wiedemann, 1828: 535; Loew 1858: 352; 1860: 102; Hull 1962: 300.
Euscelidia nitida, Engel 1929: 154; Oldroyd 1974: 20; Lehr 1988: 266.

Diagnosis: The species is distinguished from congeners by the densely grey pruinose sct with two narrow median apruinose stripes and two lateral apruinose stripes, the apruinose proximal half of abdominal T2, and features of the ♂ terminalia.

Redescription: *Head:* Black; fc silver pruinose, fc gib distinct, mystax white, few macrosetae; oc tr grey pruinose dorsally; occ grey pruinose, setae white; *Antennae* - scp light brown, setae brown; ped light brown, setae brown; pped light brown, white pruinose dorsally in proximal half of length; apsel brown; *Thorax:* Black; sct grey pruinose, 2 narrow median stripes, not reaching posterior margin, and 2 lateral stripes, not reaching anterior and posterior margins, apruinose; sctl grey pruinose, ds sctl s and sctl very short, white; *Legs* - yellow to brown; pro and meso fem yellow, meta fem pale yellow proximally, clubbed, club brown; tib light brown, pale yellow stripe not reaching tip on meta tib anteriorly, meta tib brown in distal half; emp about a quarter of length of clw; *Wings* - hyaline, very few microtrichia on remigium; ptero distinct, brown; cell d terminating in 3 veins; hlt yellow; *Abdomen:* Black; T predominantly brown pruinose, anterior, lateral, and posterior margins grey pruinose, T2 in proximal half with apruinose spot, T1 with white setae, T2 with few white setae laterally, S grey pruinose; ♂ *terminalia* Figs 51A–D - sur pointed distally; lobe ventrally; hypd ventral margin straight, distally with 2 pointed lobes; d aed shea tubular; lat apod bifurcated.

Type material - The ♀ lectotype, here designated to preserve stability and make more universal the use of this name, is labelled 'Nubien Rüppell (handwritten) / *L. nitidus* Wied. * (handwritten) / (small red label) / 9973 / Holotypus (red label) / LECTOTYPE *Leptogaster nitidus* Wiedemann, 1828 by T. Dikow 2000 (red label)'. The specimen is directly mounted, is in fairly poor condition (left meso and meta leg, right meta leg, and left wing broken), and is deposited in the ZMHB.

The ♀ paralectotype is labelled 'Abyssinia Dr. Rüppell. / 113 (blue label with black submarginal border) / *Leptogaster nitidus* Wied. (handwritten) / Typus (red label with black submarginal border) Dipt. 87 (on white backside of label) / PARALECTOTYPE *Leptogaster nitidus* Wiedemann, 1828 by T. Dikow 2000 (yellow label)'. The specimen

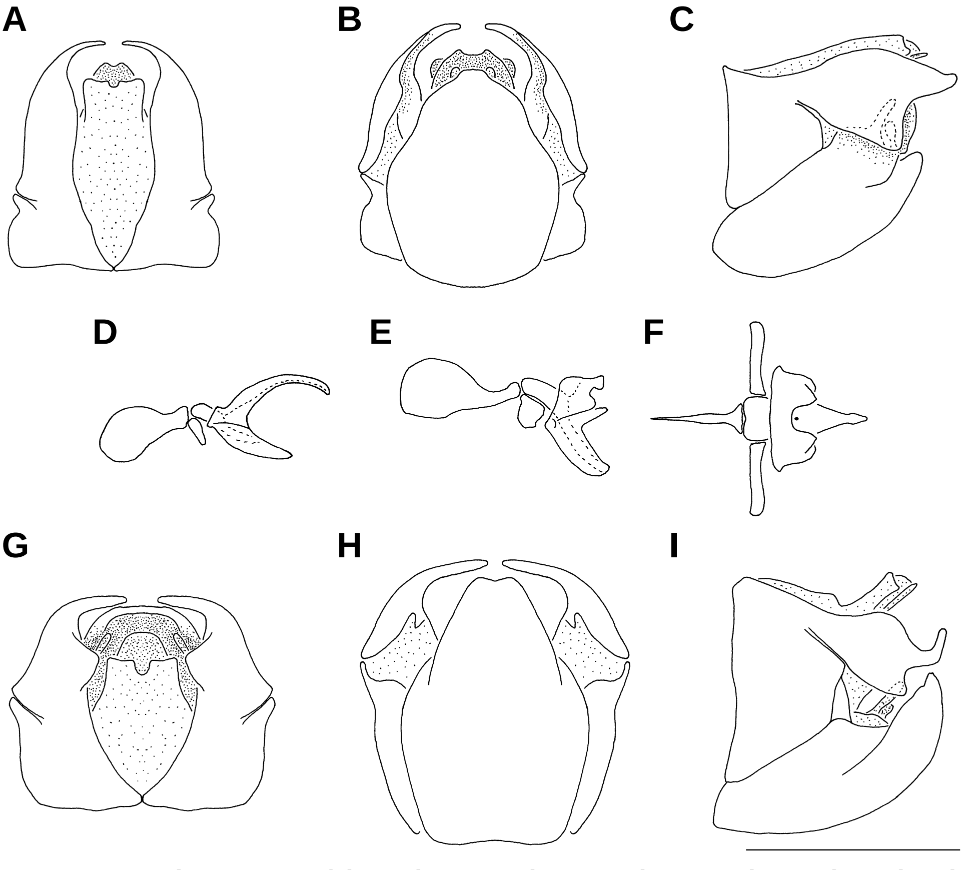

Fig. 51. ♂ terminalia. A–D. *Euscelidia nitida*. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. E–I. *E. obtusa* sp. n. E. Aedeagus lateral. F. Aedeagus dorsal. G. Dorsal. H. Ventral. I. Lateral. Scale line = 1 mm.

is in poor condition (right antenna, left meso and meta legs broken, specimen greasy) and is deposited in the SMFD. The paralectotype of undeterminable gender is labelled 'Abyssinia Dr. Rüppell. / Paratypoid (red label with black submarginal border) Dipt. 87a (on white backside of label) / PARALECTOTYPE *Leptogaster nitidus* Wiedemann, 1828 by T. Dikow 2000 (yellow label)'. The specimen is directly mounted, is in poor condition (antennae, left pro tarsus, left meso leg, right meta leg, and abdomen broken), and is deposited in the SMFD.

Type locality and distribution (Fig. 53): Nubien – Nubia is a classic term for an ancient kingdom in north-eastern Africa, an area today probably comprising Egypt and Sudan, no co-ordinates available. Probably Egypt and Sudan. Additionally to the specimens examined the species is known to occur in Arabia (Lehr 1988; Oldroyd 1980).

Material examined: EGYPT: 1♂ no exact locality data. Depository: NHMW.

Euscelidia obtusa sp. n.

Figs 51E–I, 61

Etymology: Latin adjective *obtusus* = blunt; refers to the blunt, slightly pointed distal margin of the hypandrium.

Diagnosis: The species is distinguished from congeners by the few microtrichia on the wings and features of the ♂ terminalia (sur with dorsal and ventral lobe, short lat pr aed extending gonp).

Description: *Head:* Black; fc yellow pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brown and dark brown, setae white; oc tr white pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp brown, white setae ventrally, white pruinose; ped brown, white setae ventrally and brown setae dorsally, white pruinose; pped proximally light brown, remaining part brown, white pruinose proximally and ventrally; apsel hyaline.

Thorax: Black; ppro peg small, distinct, silver pruinose; sct black, sometimes anterior and lateral margins orange, predominantly yellow pruinose, margins silver pruinose, 2 lateral triangular spots, anterior and posterior to trn sut, apruinose (not as distinct as in other species), yellow setae on margins; macrosetae: 1 white npl s, 1 white or black spal s; sctl white pruinose, ds sctl s and sctl s long, white; *Legs* - yellow to brown; pro and meso fem yellow, setae white, meta fem slightly clubbed, pale yellow proximally, club dorsally brown with short white setae; pro and meso tib yellow, pale yellow stripe anteriorly, meta tib brown, yellow proximally, pale yellow stripe not reaching tip anteriorly; first tar yellow, remaining tar light brown, setae black; emp minute; *Wings* - hyaline, few microtrichia scattered on remigium and on distal margin; ptero distinct, brown; cell d terminating in 2 veins; hlt yellow.

Abdomen: Black; T brown pruinose, anterior and posterior margins grey pruinose, T1 with long brown setae laterally, T2 in proximal half with white setae laterally, remaining T with short white and yellow setae, S grey pruinose; ♂ *terminalia* Figs 51E–I - sur pointed distally, lobe dorsally and ventrally; hypd bent upwards, not divided; d aed shea short, lat pr aed extending gonp; lat apod simple.

Type material - The ♂ holotype is labelled 'KENYA #60 Nguruma, Kajiado dist 01°50'S:36°56'E 700 m v.1990, Rift valley COLL: I. M. I. Abu-Zinid Alluvial plains /

♂ 2488 (handwritten) / HOLOTYPE *Euscelidia obtusa* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is double mounted (minuten in block of foam), is in very good condition (met legs broken), and is deposited in the NMSA.

A ♂ paratype is labelled 'Magadi, Brit. E. Africa [British East Africa = Kenya], April 1912. F. G. Hamilton. 1915-374 / PARATYPE *Euscelidia obtusa* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is double mounted (minuten in rectangular piece of plastic), is in poor condition (sct cracked, left pro and meso leg broken, specimen greasy), and is deposited in the BMNH. A ♂ paratype is labelled 'KENYA, Rt. A109 Hunters's Lodge 2,7.XII.1989 [2–7.xii.1989] A. FREIDBERG & FINI KAPLAN / PARATYPE *Euscelidia obtusa* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is double mounted (minuten in block of foam), is in very good condition (abdomen broken attached to foam block; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the NMSA. 3♀♀ paratypes are labelled 'KENYA: Machakos #83 40km SE of Nairobi 01°28'S:37°03'E 1700 m Date: 29.xi.1992 A Whittington & J Londt Lukenya cliffs/ bushveld / PARATYPE *Euscelidia obtusa* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimens are double mounted (minuten in block of foam), are in excellent condition, and are deposited in the NMSA. 2♀♀ paratypes are labelled 'KENYA Rt. A109 50 km SE Nairobi 30.IV.1991 A. FREIDBERG & FINI KAPLAN / PARATYPE *Euscelidia obtusa* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimens are double mounted (minuten in block of foam), are in good to very good condition (1♀ head broken), and are deposited in the NMSA. A ♂ paratype is labelled 'SALISBURY [Harare] Mashonaland March 1900 G. A. K. Marshall ('March 1900' handwritten) / 79 / PARATYPE *Euscelidia obtusa* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is double mounted (minuten in circular piece of cardboard), is in good condition (sct cracked; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the BMNH.

Type locality and distribution (Fig. 61): Kenya, Nguruma, 1°50'S 36°56'E. Kenya, Zimbabwe.

Euscelidia obudu sp. n.

Figs 50, 52A–D

Etymology: Noun in apposition that refers to the type locality Obudu, Nigeria.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose sct and abdominal tergites, the brown coloration of the thorax, and features of the ♂ terminalia (sur with dorsal and ventral lobe, hypd bent upwards).

Description: *Head:* Dark brown; fc yellow pruinose, fc gib indistinct, mystax white, 7 macrosetae; prob and plp brownish-black, setae white; oc tr apruinose; occ brown pruinose dorsally, silver pruinose ventrally, setae yellowish; *Antennae* - scp brown, brown setae ventrally; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel hyaline.

Thorax: Dark brown; ppro peg large, silver pruinose; sct dark brown, antero-laterally brown (forming a pattern of a median stripe reaching anterior margin and lateral stripes not reaching anterior margin), predominantly apruinose, margins silver pruinose, white and brown setae on margins, short presut and psut dc setae present; macrosetae: black,

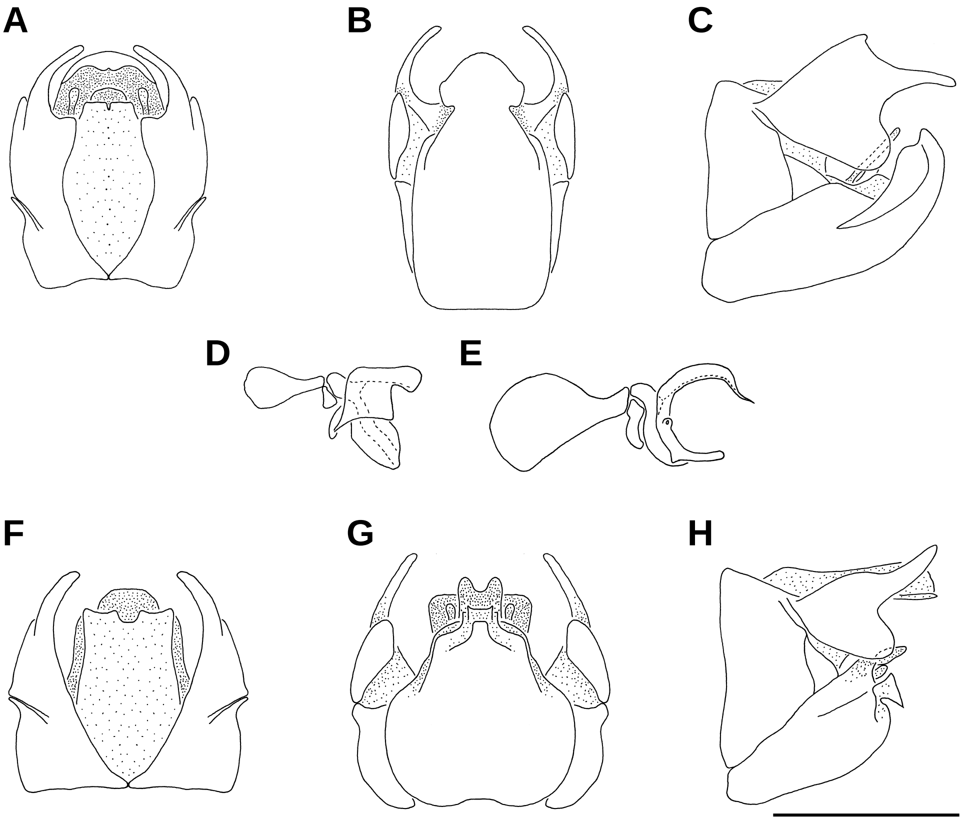

Fig. 52. ♂ terminalia. A–D. *Euscelidia obudu* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. E–H. *E. pallasii*. E. Aedeagus lateral. F. Dorsal. G. Ventral. H. Lateral. Scale line = 1 mm.

1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s long, brown; *Legs* - yellow to brown; pro and meso fem light brown, meta fem clubbed, pale yellow proximally, club brown (light brown towards tip), setae white; tib brown, pale yellow stripe not reaching tip on meta tib anteriorly; first tar on pro and meso tarsi pale yellow proximally, on meta tarsus pale yellow in proximal half, remaining tar brown, black setae; emp minute; *Wings* - hyaline, microtrichia only on distal margin of cells r_1-r_4; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Brown; T in proximal half apruinose, distal half brown pruinose, lateral and posterior margins grey pruinose, T2 in proximal 2/3 apruinose, T1 with long brown setae laterally, T2 in proximal 2/3 with white setae laterally, remaining T with white setae, T8 in ♀ apruinose, S proximally apruinose, remaining part grey pruinose; ♂ *terminalia* Figs 52A–D - sur pointed distally, lobe dorsally and ventrally; hypd bent upwards; d aed shea short, blunt; lat apod simple.

Type material - The ♂ holotype is labelled 'Nigeria: Obudu CR SE State 25.iii.1971 Col. J. T. Medler ('Obudu CR', 'SE', and '25' handwritten) / 09-0 / HOLOTYPE *Euscelidia obudu* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is directly

mounted, is in very good condition (right wing broken; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the BMNH.
The ♀ paratype has same labels as holotype except ‘PARATYPE *Euscelidia obudu* sp. nov. det. T. Dikow 2001 (yellow label)’. The specimen is directly mounted, is in excellent condition, and is deposited in the BMNH.

Type locality and distribution (Fig. 50): Nigeria, Obudu, 6°40'N 9°09'E. Nigeria.

Euscelidia pallasii (Wiedemann, 1818)

Figs 4A–B, D, 7A, 52E–H, 53

Leptogaster pallasii Wiedemann, 1818: 57.
Leptogaster conopsoides (Pallas in Wiedemann, 1818), a collection name.
Euscelidia pallasii, Hull 1962: 305 (as junior synonym of *conopsoides*); Lehr 1988: 266.
Leptogaster pubiceps Loew, 1871: 70.
Euscelidia pubiceps, Hermann 1926: 147; Hull 1962: 305 (as junior synonym of *conopsoides*); Lehr 1988: 266 (as junior synonym of *pallasii*).

Diagnosis: The species is distinguished from congeners by the predominantly apruinose sct, the distinct alveoli on the sct, and the darkened wings.

Redescription: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; oc tr white pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp light brown, setae white; ped light brown, white or brown setae ventrally and dorsally, white pruinose; pped light brown, white pruinose; apsel yellow; *Thorax:* Black; sct predominantly apruinose, margins silver pruinose, sometimes grey pruinosity extending onto sct antero-laterally, macrosetae: white, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s short, white; *Legs* - yellow to brown; pro and meso fem yellow proximally, brown distad, meta fem pale yellow proximally, distal half brown, clubbed; pro and meso tib light brown, yellow stripe anteriorly, meta tib in proximal half yellow, distal half brown, pale yellow stripe not reaching tip anteriorly; emp short, about a quarter of length of clw; *Wings* - densely covered with microtrichia, proximal 2/3 brown stained, distal third more greyish; ptero distinct, brown; cell d terminating in 2 veins; hlt yellow to brown; *Abdomen:* Brown; T predominantly brown pruinose, anterior and posterior margins grey pruinose,T2 in proximal half apruinose, T1 with black setae, T2 in proximal half with few white setae laterally, remaining T with white or brown setae, S grey pruinose; ♂ *terminalia* Figs 52E–H - sur pointed distally, lobe ventrally; hypd ventral margin straight, with triangular sclerite distally; d aed shea tubular, medium length; lat apod bifurcated.

Type material - The syntype(s) of *Leptogaster pallasii* has to be considered lost. I was unable to locate the depository for the specimen(s).
The ♂ holotype of *Leptogaster pubiceps* is labelled ‘Epirus Erber (handwritten) / *Leptogaster pubiceps* Lw. (handwritten) / 9970 / [small violet square] / [blue square] / Coll. H. Loew / Holotypus (red label with black border)’. The specimen is directly mounted, is in very good condition (tip of right wing broken), and is deposited in the ZMHB.
Type locality and distribution (Fig. 53): Wiedemann mentioned ‘campis australibus rarior’ as the type locality. It can be translated as ‘rare in the southern plains’ and might refer to southern Russia – an area probably comprising southern European Russia and the Ukraine (Dr A. Pont pers. com.). Greece, ?Kazakhstan, Russia, Turkey, Turkmenistan,

?Ukraine. Additionally to the specimens examined the species is known to occur in Anatolia, Turkey (Janssens 1968*a*) and former Yugoslavia (pers. com. Dr M. Hradsky).

Material examined: GREECE: 12♀♀ 33♂♂ 1? Peloponnesus Island, Monemvasia, 36°40'N 23°03'E, 11.vii.1980, 1–8.vii.1982, 19.iii., 2+7+16+26+28.vii., 26–31.viii., 8+16.ix.1983, 10.ii., 25.vi., 3.vii., 11+17.ix., 6+11.x. 1984, 24+28.vi., 6.vii.1985, 16.vi.1986, 6.vii., 6.viii., 6.ix.1991; 1♀ 2♂♂ Attica, approximately 39°15'N 23°30'E; KAZAKHSTAN or RUSSIA: 2♀ Sarepta (there are several Sarepta in Kazakhstan as well as in Russia); TURKEY: 1♀ 2♂♂ 1? Istanbul, 41°04'N 28°57'E, 9+10.vii.1962; 1♂ Amasya, 40°39'N 35°49'E, 1.viii.1960; TURKMENISTAN: 1♂ Tedshen, 37°23'N 60°30'E, 26.v.1964. Depository: BMNH, NHMW, USNM, ZMUC.

Remarks: In the original description Wiedemann (1818) described the circumstances how the specific name *pallasii* was derived. Pallas probably labelled the original specimen *Asilus conopsoides*. Wiedemann realised that this name was preoccupied by Fabricius (1775). Therefore, he described the species as *Leptogaster pallasii* (he himself wrote the description in stating '*mihi*' following the species name). In the comments section he apparently mixed the generic name *Asilus* with *Dioctria*, which might have led to confusion. Hull (1962) listed *conopsoides* as a valid species described by Pallas in Wiedemann, 1818. Lehr (1988) referred to Pallas' species *conopsoides* as a collection name only. I consider the specific name *pallasii* as the valid name.

Euscelidia peteraxi sp. n.

Figs 11A–E, 14

Etymology: The specific name '*peteraxi*' is a noun in apposition. The name is proposed by the Gesellschaft für Biologische Systematik (Organisms, Diversity & Evolution) to

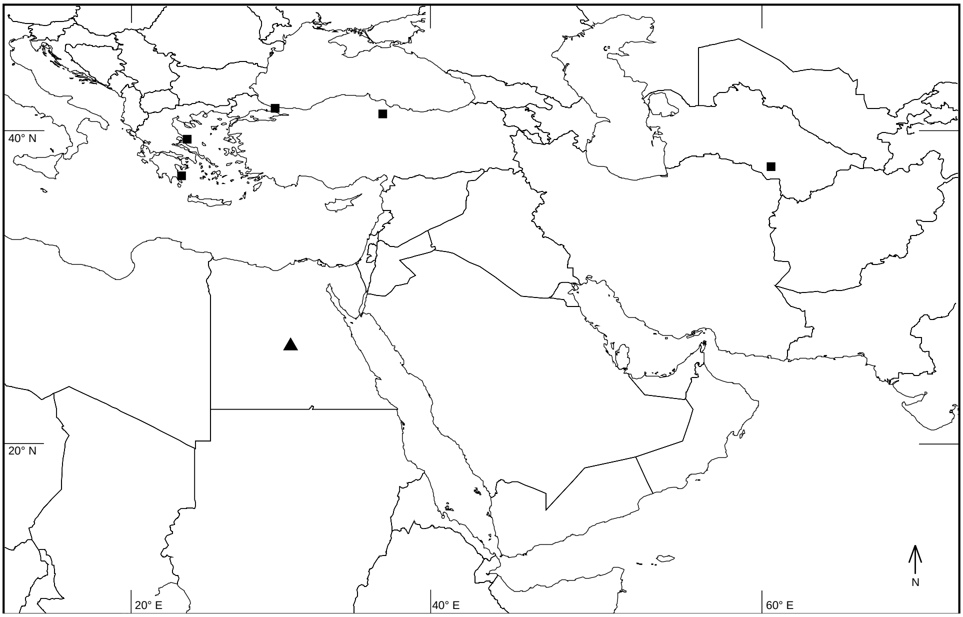

Fig. 53. Distribution. *Euscelidia nitida*, triangle; *E. pallasii*, squares.

acknowledge the contribution to phylogenetic systematics made over many years by Prof. Dr Peter Ax, Göttingen, Germany, who has been awarded an honorary membership of the society.

Diagnosis: The species is distinguished from congeners by the short, rigid macrosetae comprising the mystax, grey pruinose sct, and features of the ♂ terminalia (sur with lobe dorsally and ventrally, d aed shea very short).

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many short, rigid macrosetae; prob and plp dark brown, setae white; oc tr silver pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp brown, white setae ventrally, white pruinose; ped brown, brown setae ventrally and dorsally, white pruinose; pped light brown, white pruinose; apsel hyaline with brown tip.

Thorax: Black; ppro peg large, silver pruinose; sct black, sometimes orange on anterior margin, brown pruinose, margins silver pruinose, 2 narrow median longitudinal stripes, not reaching posterior margin, and 2 lateral stripes, not reaching anterior and posterior margins, apruinose, white setae on margins; macrosetae: white, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s short, white; *Legs* - yellow to brown; fem yellow proximally, brown distally, setae white, meta fem clubbed, club with short white setae; tib proximally yellow, brown distad, pale yellow stripe not reaching tip on meta tib anteriorly; first tar yellow, brown distad, remaining tar brown, setae black; emp minute; *Wings* - hyaline, brown stained, especially anterior and posterior to r-m, microtrichia evenly scattered on remigium; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; T predominantly brown pruinose, anterior, lateral, and posterior margins grey pruinose, T1 with long brown setae laterally, T2 in proximal third with few brown setae laterally, remaining T with short yellow and brown setae, S grey pruinose; ♂ *terminalia* Figs 11A–E - sur pointed distally, lobe dorsally and ventrally; hypd bent upwards, divided distally into 2 short lobes; d aed shea short; lat apod simple.

Type material - The ♂ holotype is labelled 'SOUTH WEST AFRICA 2617Ca Bethanien Dist. 15 km. W. Goageb, 1100 m. 19-II-1974 ME Irwin, sandy river bed / HOLOTYPE *Euscelidia peteraxi* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is double mounted (minuten in block of foam), is in excellent condition, and is deposited in the NMSA.

The ♂ paratype is labelled 'SOUTH WEST AFRICA 2617Ca Bethanien Dist. 15 km. W. Goageb, 1100 m. 19-II-1974 ME Irwin, sandy river bed / PARATYPE *Euscelidia peteraxi* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is double mounted (minuten in block of foam), is in excellent condition, and is deposited in the NMSA.

Type locality and distribution (Fig. 14): Namibia, Goageb (15 km W), 26°41'S 17°05'E. Namibia.

Material examined: NAMIBIA: 1♀ Okahandja, 21°58'S 16°54'E, 2–4.ii. 1972; 1♂ Okahandja, 24.i.1934; 1♂ Omaruru, 2115BD, 5.ii.1974; 1♂ Gobabeb, 23°32'S 15°01'E, 8.vi.1979; 2♀♀ 1♂ Khan river, 21°47'S 15°55'E, 27.iii.1984. Depository: BMNH, NMSA.

Euscelidia picta sp. n.

Figs 54, 59

Etymology: Latin adjective *picta* = coloured; refers to the orange-red and black coloration of the thorax.

Diagnosis: The species is distinguished from congeners by the antero-lateral orange-red coloration of the sct, the few microtrichia on the wings, and features of the ♂ terminalia (hypd bent upwards and divided into two lobes, lat pr aed short, extending gonp).

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, 9 macrosetae; prob and plp brown-black, setae white; oc tr apruinose; occ silver pruinose, brownish pruinose medially, setae white; *Antennae* - scp brown, white setae ventrally, white pruinose; ped brown, white setae ventrally and brown setae dorsally, white pruinose; pped brown, white pruinose proximally and ventrally; apsel brown.

Thorax: Black and orange; ppro peg small, distinct, silver pruinose; sct predominantly black, antero-laterally orange, brown pruinose medially, silver pruinose laterally, 2 antero-lateral spots apruinose, white setae on margins; macrosetae: 1 white npl s, 1 black spal s; sctl silver pruinose, ds sctl s and sctl s long, white; *Legs* - yellow to brown; coxae white pruinose; fem yellow proximally, brown distad, setae white, meta fem clubbed; tib brown, pale yellow stripe not reaching tip on meta tib anteriorly; first tar yellow, brown distad, remaining tar brown, setae black; emp short, distinct; *Wings* - hyaline, slightly brown stained, few microtrichia in distal half; ptero distinct, brown; cell d terminating in 2 veins; hlt yellow.

Abdomen: Black; T predominantly brown pruinose, anterior, lateral, and posterior margins grey pruinose, T1 with long brown setae laterally, T2 in proximal third with white setae laterally, remaining T with short white and yellow setae, S grey pruinose; ♂ *terminalia* Fig. 54 - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 lobes; d aed shea short, lat pr short, extending gonp; lat apod simple.

Type material - The ♂ holotype is labelled ‘Nyassa-See Langenburg 8.5.99 [8.v.1899] Fülleborn S. (blue label, date handwritten) / HOLOTYPE *Euscelidia picta* sp. nov. det. T. Dikow 2001 (red label)’. The specimen is directly mounted, is in good condition (right meso leg broken, abdomen proximally cracked; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the ZMHB.

Type locality and distribution (Fig. 59): Tanzania, Lake Malawi, Lumbria (former Old Langenburg), northern shore of Lake Malawi, 9°34'S 34°07'E. Tanzania.

Euscelidia pipinna sp. n.

Figs 19, 55

Etymology: Latin noun *pipinna* = small penis; refers to the small size of the aedeagus as well the small body size of this species.

Diagnosis: The species is distinguished from congeners by the small size, the predominantly apruinose sct, and features of the ♂ terminalia.

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brown, setae white; oc tr white pruinose dorsally; occ silver

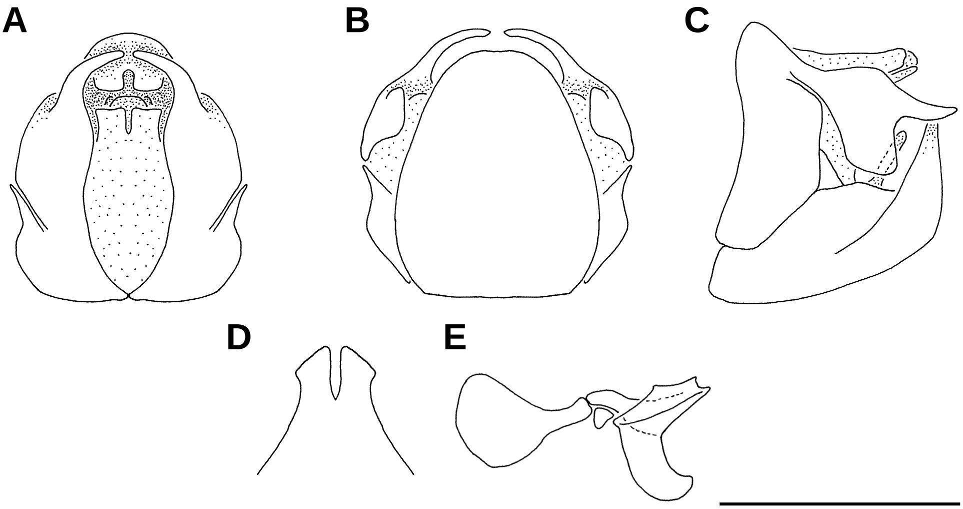

Fig. 54. ♂ terminalia *Euscelidia picta* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Hypandrium posterior. E. Aedeagus lateral. Scale line = 1 mm.

pruinose, setae white; *Antennae* - scp brown, brown setae ventrally, white pruinose; ped brown, brown setae ventrally and dorsally, white pruinose; pped light brown, white pruinose; apsel brown.

Thorax: Black; ppro peg small, distinct, silver pruinose; sct predominantly silver pruinose, 2 narrow longitudinal median stripes, not reaching posterior margin, and 1 antero-lateral spot and 1 lateral spot posterior to trn sut apruinose; macrosetae: 1 white npl s, 1 black spal s; sctl silver pruinose, ds sctl s and sctl s long, white; *Legs* - yellow to brown; pro and meso fem light brown, meta fem pale yellow proximally, clubbed, club brown; pro and meso tib light brown, pale yellow stripe not reaching tip anteriorly, meta tib pale yellow proximally and anteriorly, remaining part brown; first tar yellow, brown distad, remaining tar brown, setae black; emp minute; *Wings* - hyaline, microtrichia evenly scattered on remigium; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; brown pruinose medially, grey pruinose on anterior, lateral, and posterior margins, T1 with long white setae laterally, T2 with few white setae laterally, remaining T with short yellow and brown setae, S grey pruinose; ♂ *terminalia* Fig. 55 - sur pointed distally, lobe dorsally and ventrally; hypd bent upwards; d aed shea short, blunt; lat apod simple.

Type material - The ♂ holotype is labelled 'BOTSWANA SE 2226BD Farmers Brigade 5 kms SE of Serowe Hillside N slope. P Forchhammer Malaise trap 2. Vapona xii 1985 ('Malaise trap', 'Vapona', and date handwritten) / HOLOTYPE *Euscelidia pipinna* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is directly mounted, is in relatively poor condition (specimen greasy), and is deposited in the NMSA.

Type locality and distribution (Fig. 19): Botswana, Serowe, 22°22'S 26°43'E. Botswana.

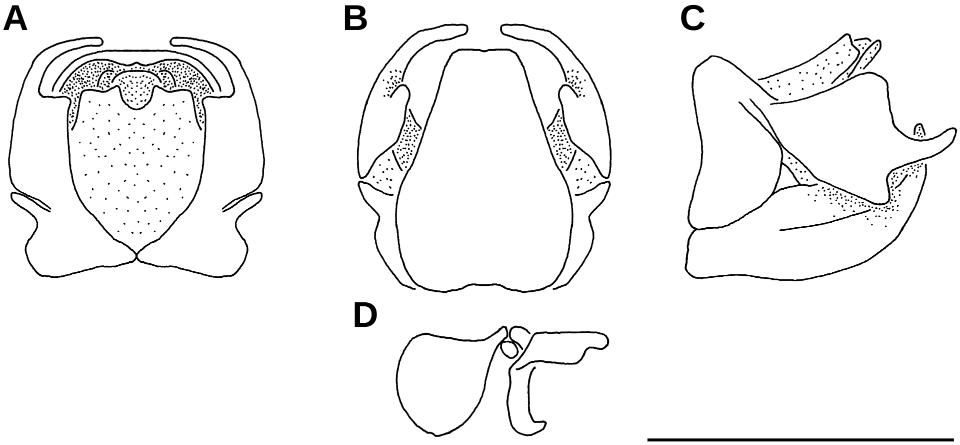

Fig. 55. ♂ terminalia of *Euscelidia pipinna* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. Scale line = 1 mm.

Euscelidia popa sp. n.

Fig. 60

Etymology: Noun in apposition that refers to the type locality Mt. Popa, Myanmar.

Diagnosis: The species is distinguished from congeners by the overall yellow to gold pruinosity and setae and the densely arranged microtrichia on the wings.

Description: *Head:* Black; fc gold pruinose, fc gib indistinct, mystax yellow, many macrosetae; prob and plp brownish-black, prob with white setae, plp with yellow and brown setae; oc tr apruinose; occ yellow pruinose, setae yellow; *Antennae* - scp brown, brown setae ventrally; ped brown, brown setae ventrally and dorsally, white pruinose; pped ventrally light brown, brown dorsally, white pruinose; apsel brown.

Thorax: Black; ppro peg large, yellow pruinose; sct bluish-black, antero-laterally red, gold pruinose, apruinose indistinct spots laterally, yellow setae scattered on surface; macrosetae: black, 1 npl s, 1 spal s; mesopleura gold pruinose; sctl gold pruinose, ds sctl s and sctl s long, yellow; *Legs* - light brown to brown; fem light brown, setae white, meta fem slightly clubbed, club with brown setae; pro and meso tib light brown, yellow stripe anteriorly, meta tib in proximal half light brown, distal half brown, yellow stripe anteriorly; first tar yellow, brown distad, remaining tar brown, black setae; emp short, nearly a quarter of length of clw; *Wings* - densely covered with microtrichia, cells c, sc, proximal half of r_1, br, and bm dark brown, R_{2+3} bent anteriorly and R_4 bent posteriorly (distal tip of cell r_2 widened); ptero distinct, brown; cell d terminating in 2 veins, cell a_1 nearly closed; hlt light brown.

Abdomen: Dark brown; T predominantly brown pruinose, anterior, lateral, and posterior margins grey pruinose, T1 with long yellow setae laterally, T2 with yellow setae laterally, remaining T with yellow or brown setae, S grey pruinose; ♂ *terminalia* - ♂♂ specimens unknown.

Type material - The ♀ holotype is labelled ‘Upper Burma [Myanmar] Mt. Popa 600–1000 m, X. u. XI. 37 [x.–xi.1937] leg. G. Heinrich (yellow label) / Brit. Mus. 1939-186

/ HOLOTYPE *Euscelidia popa* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is directly mounted, is in excellent condition, and is deposited in the BMNH.

Type locality and distribution (Fig. 60): Myanmar, Mount Popa, 20°53'N 95°14'E. Myanmar.

Remarks: Despite the fact this species is only known from a single female I decided to describe it as a new species because it is easily distinguished from all other Oriental species by the overall gold and yellow appearance.

Euscelidia procula (Walker, 1849)

Figs 56, 57A–D

Leptogaster proculus Walker, 1849: 482; Hull 1962: 300.
Euscelidia procula, Hermann 1926: 147; Engel 1929: 154; Janssens 1955: 304; Oldroyd 1974: 20 1980: 357.
Leptogaster stigmaticalis Loew, 1852: 658 1858: 352 1860: 100; Speiser 1910: 82; Hull 1962: 300. **syn. n.**
Euscelidia proculus var. melanostoma Janssens, 1953: 6; Oldroyd 1980: 357. **unavailable name**
Euscelidia oldroydi Lindner, 1955: 28; Oldroyd 1980: 357. **syn. n.**

Diagnosis: The species is distinguished from congeners by the orange to red antero-lateral margins of the sct, predominantly apruinose sct, and the few microtrichia and brown staining of the wings.

Redescription: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; oc tr apruinose; occ silver pruinose, setae white; *Antennae* - scp brown,

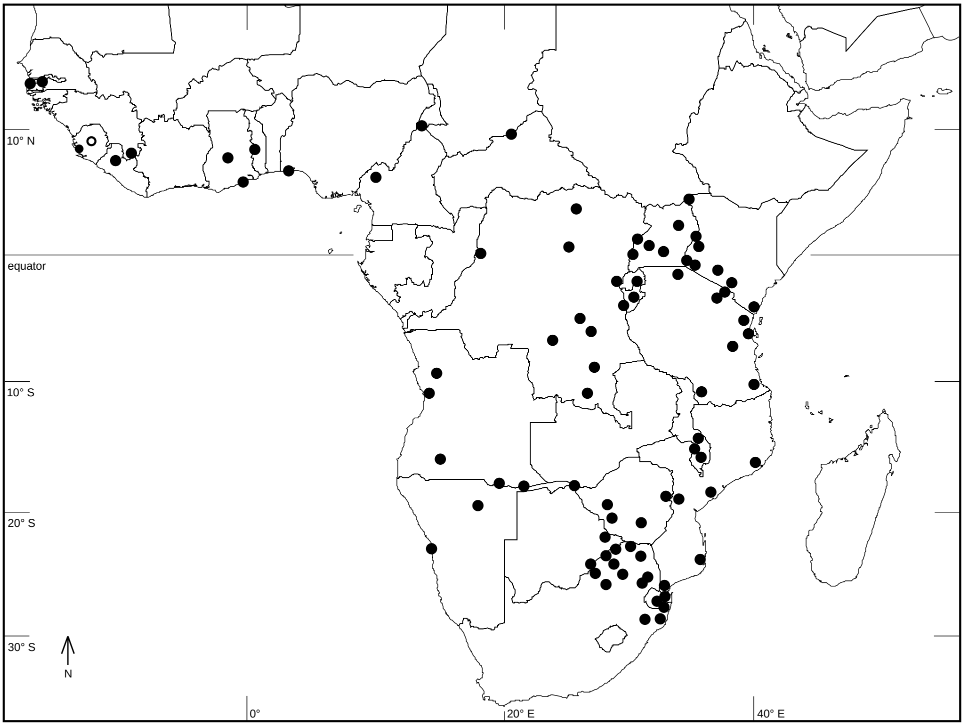

Fig. 56. Distribution of *Euscelidia procula*, circles.

setae brown; ped brown, setae brown; pped light brown, white pruinose dorsally in proximal half; apsel dark brown; *Thorax:* Orange-red to black; sct predominantly orange-red, 3 longitudinal stripes, median stripe divided anteriorly and not reaching posterior margin, lateral stripes originating medially, reaching posterior margin, black, stripes often fused in posterior half, lateral and posterior margins white pruinose, short white setae scattered on anterior, lateral, and posterior margins, macrosetae: white or black, 1 npl s, 1 spal s, sometimes 1 pal s; sctl silver pruinose, ds sctl s and sctl s long, white; *Legs* - yellow to brown; pro and meso fem light brown, meta fem yellow proximally, clubbed, club brown, setae white; tib brown, yellow stripe not reaching tip anteriorly; emp distinct, very short; *Wings* - hyaline, brown stained, especially in anterior half; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown; *Abdomen:* Brown to black; T grey pruinose, T2 apruinose, T1 with black setae, T2 with few white setae laterally, S grey pruinose, S1–3 apruinose; ♂ *terminalia* Figs 57A–D - sur not particularly pointed distally, lobe ventrally, small lobe dorsally; hypd ventral margin straight; d aed shea tubular, medium length; lat apod bifurcated.

Type material - The lectotype of undeterminable gender of *Leptogaster proculus*, here designated to preserve stability and make more universal the use of this name, is labelled

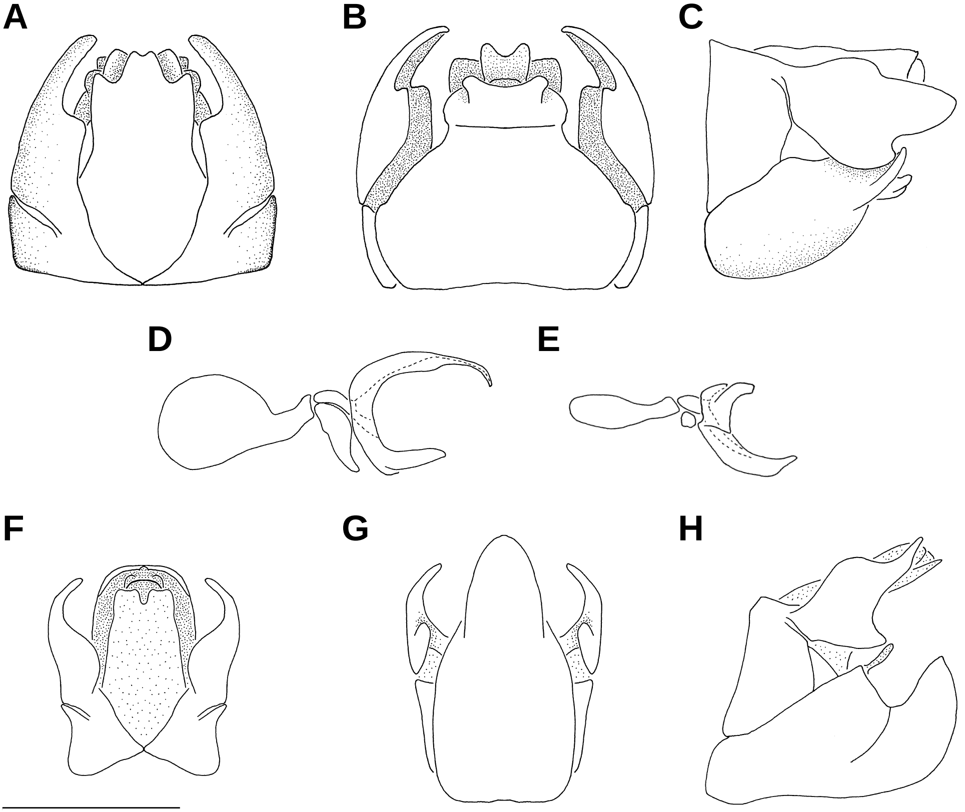

Fig. 57. ♂ terminalia. A–D. *Euscelidia procula*. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. E–H. *E. prolata* sp. n. E. Aedeagus lateral. F. Dorsal. G. Ventral. H. Lateral. Scale line = 1 mm.

'Type (circular label with green submarginal border) / Sierra Leone (handwritten) Presented by the Rev. D.F. Morgan (on backside) / Sierra Leone. Pres. by Rev. D.F. Morgan (handwritten) / HOLOTYPE *Leptogaster proculus* Walker det. J.E. CHAINEY 1982 (handwritten) Holotype (circular label with red border, attached to the other label) / LECTOTYPE *Leptogaster proculus* Walker, 1849 by T. Dikow 2001 (red label)'. The specimen is double mounted (minuten in rectangular piece of plastic), is in good condition (met legs broken, abdomen broken from the third segment), and is deposited in the BMNH.

The ♂ lectotype of *Leptogaster stigmaticalis*, here designated to preserve stability, is labelled 'Mozambique Inhambana Peters S. (blue label) / Type (red label) / LECTOTYPE *Leptogaster stigmaticalis* Loew, 1852 by T. Dikow 2001 (red label)'. The specimen is directly mounted, is in good condition (sct cracked; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the ZMHB. The ♀ paralectotype is labelled 'Mozambique Inhambana Peters S. (blue label) / [small violet square] / Coll. H. Loew / Type (red label) / PARALECTOTYPE *Leptogaster stigmaticalis* Loew, 1852 by T. Dikow 2001 (yellow label)'. The specimen is directly mounted, is in very good condition, and is deposited in the ZMHB. The ♀ paralectotype is labelled 'Mozambique Inhambana Peters S. (blue label) / Type (red label) / PARALECTOTYPE *Leptogaster stigmaticalis* Loew, 1852 by T. Dikow 2001 (yellow label)'. The specimen is directly mounted, is in good condition (right wing broken), and is deposited in the ZMHB. The ♂ paralectotype is labelled 'Mozambique Inhambana Peters S. (blue label) / 640 / Type (red label) / PARALECTOTYPE *Leptogaster stigmaticalis* Loew, 1852 by T. Dikow 2001 (yellow label)'. The specimen is directly mounted, is in good condition (left antenna broken), and is deposited in the ZMHB.

The ♂ holotype of *Euscelidia oldroydi* is labelled 'Msingi 9.VI.–17.VI.1952 [9–17.vi.1952] D. O. Afrika Exp. [Deutsch Ost-Afrika Expedition] (blue label) / Typus Lindner 1954 (handwritten in red ink; white label with black submarginal border) / *Euscelidia oldroydi* Lind. Lindner det. (handwritten except for 'Lindner det.'; black submarginal border)'. The specimen is directly mounted, is in very good condition, and is deposited in the SMNS. The ♀ paratype is labelled 'Mugango a. [am] Victoria See 19.–25.III.1952 D. O. Afrika Exp. (blue label) / Mugango 19.III.52 / *Euscelidia oldroydi* Lind. Lindner det. / (handwritten except for 'Lindner det.') / ParaTypus Lindner 1954 (handwritten in red ink; label with black submarginal border)'. The specimen is directly mounted, is in very good condition, and is deposited in SMNS.

Type locality and distribution (Fig. 56): Sierra Leone, no exact locality. Angola, Botswana, Burundi, Cameroon, DR Congo, The Gambia, Ghana, Guinea, Kenya, Liberia, Malawi, Mozambique, Namibia, Nigeria, Sierra Leone, South Africa, Tanzania, Togo, Uganda, Zimbabwe.

Material examined: ANGOLA: 1♂ Salazar, 9°18'S 14°54'E, 9–15.iii.1972; 1♂ Gabela, 10°50'S 14°21'E, 16–18.iii.1972; 1♀ Rocadas, 16°00'S 15°10'E, 19–22.ii.1972; BURUNDI: 1♂ Bugoma Forest, 2°19'S 30°24'E 1–5.xii.1911; 1♀ 1♂ Ruyigi, 3°28'S 30°14'E, v.1956, 1♀ Rutana, 3°55'S 29°59'E, 19.vi.1952; 1♀ 1♂ Bururi, 3°56'S 29°36'E, 7.iii.1953; 1♀ 4♂♂ Rumonge, 3°58'S 29°26'E, vi.1948, 22.i.1950, 19.v.1952; 1♀ Makamba, 4°07'S 29°47'E, 25.vi.1949; CAMEROON: 1♂ Bossoum, 9°56'N 13°41'E, 1–10.v.1914; 1♂ Bamenda, 5°57'N 10°08'E, 7.xii.1937; 1♂ Bali-Batibo, 5°53'N 10°00'E, 20.xi.1987; DR CONGO: 2? Bambesa, 3°27'N 25°41'E, 25.ix.1933, v.1937; 1♀ Kisangani, 0°13'N 25°11'E, 10.ii.1928; 1♀ 1? Eala, 0°04N 18°17'E, xii.1935, ii.1936; 1♂ Lwiro, 2°13'S 28°47'E, xi.–xii.1966; 1♀ Lualaba River, 6°02'S 26°51'E, 25.iv.1907; 1? Sankuru, 6°44'S 23°56'E, 4.vi.1960; 1? Upemba National Park, Lusinga, 8°55'S 27°11'E, 2–4.v.1949; 1♂ Kambove, 10°51'S 26°35'E, 2.iv.1907; THE GAMBIA: 1♀ Kiang West National Park, 13°23'N 15°55'W, 16.x.1999; 1♀ 1♂ Tendaba, 13°26'N 15°49'W, 1.x.1987; 1♀ 1♂ Keneba, 13°20'N 16°01'W, 22.vii.1971, 13.ix.1971; 1♂ Gunjur, 13°12'N 16°44'W, 13.xi.1977; GHANA: 1? Ejura, 7°22'N 1°22'W, 1.xi.1952; 1? Accra, 5°33'N 0°22'W, 13.vii.1941; GUINEA: 2♀♀ 1♂ N'Zerekore, 7°44'N 8°49'W, 21.iv.1950; 1♀ 1♂ no exact locality; KENYA: 1♂ Matembur, 1°22'N 35°03'E, 26–27.v.1980; 1♀ Uasin Gishu, 0°22'N 35°30'E, 25.xi.1992; 1♀ Kakamega Forest, 0°16'N 34°44'E, 9.x.1975; 2♀♀ Malaba Forest, 0°28'N 34°51'E, 10.x.1975; 1? Mogorro River, 0°59'S 34°15'E, v.1913; 1♀ 1♂ Kuja Valley, 0°48'S 34°34'E, 30.iv.–1.v.1911; 1♂ Gelegele River, 0°53'S 35°02'E, vi.1913; 1♀ Nairobi, 1°16'S 36°46'E, v.1928; 1♀ Olkejuado, 1°25'S 36°37'E, 18.xi.1992; 1♂ Kajiado, 2°11'S 37°41'E, 30.xi.1992; 3♀♀ Kibwezi, 2°24'S 37°57'E, 2–4.iv.1911; 1♀ 1? Mombasa, 4°02'S 39°40'E, 19.vi.1962, 21.xi.1994; 1♀ Kwall Forest, 4°03'S 39°40'E, 1.vi.1948; 2♀♀ 1? Muhaka forest, 4°14'S 39°25'E, 13.xi.1992; 1♀ 1♂ Godoni forest, 4°19'S 39°25'E, 19.viii.1975; 2♀ 1♂ 1? Kwale Forest, 4°10'S 39°26'E, 18.vi.1962, 13.v.1963; 1♂ Raimosi, v.1922; LIBERIA: 1♀ Banga, 7°16'N 10°03'W, x.1926; MALAWI: 1♂ 1? Bwamba, 14°00'S 33°44'E, 7.viii.1946; 3♀♀ 3♂♂ Mangochi, 1435AC, 11.iii.1987; 4♀♀ 3♂♂ 1? Zomba Plateau, 1535AD, 24–27.xi.1980; 32♀♀ 11♂♂ 47?? Mulanje, 15°57'S 35°37'E, 5, 20, 23 Jan, 30.xi.1912, several days during xii.1912, several days during i.1913, 3, 5, 8, 26, 28.ii.1913, 10, 11, 16, 22, 31.xii.1913, 28–30.xi.1980; MOZAMBIQUE: 3♀♀ Angoche, 16°13'S 39°54'E, 19.iii.1982; 1♀ Luabo, 18° 23'S 36° 06'E, vi.–vii.1957; 4♀♀ Amatonga forest, 19°10'S 33°44'E, 15.ii.1964, 25.vi.1964, 26.iv.1965; 6♀ 4♂♂ 4?? Maputo, 25°57'S 32°34'E, i.–iii.1914, iv.–vii.1914; 1♀ 3♂♂ Delagobai, 26°13'S 32°45'E; 1♀ Goba [several such localities], 19.iii.1980; 4♀♀ 4♂♂ Massinga [several such localities], 5–10.iv.1964; NAMIBIA: 1♀ Rundu, 17°55'S 19°45'E, 28.i.1993; 1♀ Mahango Game Reserve, 18°08'S 21°41'E, 1–5.iii.1994; 1♀ Grootfontein, 19°33'S 18°05'E, 5.iv.1972; 1♀ Swakopmund, 22°40'S 14°31'E; NIGERIA: 1♂ Lagos, 6°27'N 3°23'E, 8.ii.1946; SIERRA LEONE: 1♀ Kabala, 9°35'N 11°35'W, 28.xi.1993; SOUTH AFRICA: *Gauteng Prov:* 1♀ 1♂ Pretoria, 25°44'S 28°11'E, 30.i.1915, 16.i.1921; *KwaZulu-Natal:* 1♀ Ndumu Game Reserve, 2632CC, 26.x.1972; 8♀♀ 5♂♂ Kosi Bay Nature Reserve, 2632DD, 30.xi.–2.xii.1982; 2♂♂ eManguzi, 2632DD, 4.iv.1982; 3♀♀ 2♂♂ Jozini Dam, 2732AC, 20.ii.1979, 3.xii.1982; 1♀ False Bay Park Reserve, 27°58'S 32°22'E, 23–24.iv.1988; 1♀ 3♂♂ Sodwana Bay, 27°35'S 32°40'S, 5.iii.1987, 30.i.–1.i.1994; 1♂ Kube Yini Game Reserve, 27°48'S 32°14'E, 10–14.i.1994; 1♀ Goundhoek, 28°23'S 31°05'E, 24.ii.1990; 2♀♀ 2♂♂ 1? St. Lucia Nature Reserve, 2832AD, 18–20.xii.1981; 2♀♀ 1♂ Dukuduku Forest Reserve, 2832AD, 26.xi.1971, 18–19.vii.1981; *Mpumalanga:* 3♀♀ 4♂♂ Loskopdam Nature Reserve area, 2529AD, 24.i.1978; 1♀ Gladdespruit river, 2530DB, 23.ii.1971; 1♀ 1♂ Pretoriuskop, 25°09'S 31°15'E, i.1952, 6–7.iv.1952; *Northern Prov:* 1? Platjan Limpopo river, 2228DA, 26.i.1978; 1♀ Blouberg, 2229CC, 25.i.1978; 1♀ 1♂ Villa Nora, 2328CA, 31.i.1978; 1♂ Hans Merensky

National Reserve, 23°42'S 30°44'E, 23–25.i.1987; 1♀ 1? Modjadji Nature Reserve, 23°38'S 30°20'E, 13–14.i.1987; 1♀ Wyllie's Poort, 22°53'S 29°55'E, 21–24.i.1988; 2♀♀ Marico, 24°13'S 26°54'E, i.1921; 1♂ Bulge river, 2427BA, 30.i.1978; 1♀ 1♂ Rooiberg, 2427DA, 1.ii.1978; 1♀ Sterkrivier, 2428BA, 31.i.1978; 2♀♀ 1♂ Hangklip, 2428BB, 31.i.1978; 1♀ Warmbad, 2428CC, 1.ii.1978; 1♂ Nyl Rivier, 2428CD, 29–31.i.1978; 1♀ Vaalwater, 2429AB, 30.ii.1980; 2♀♀ 4♂♂ Potgietersrus, 2429AA, 24+28.i.1978; 1♂ Ofcolaco, 2430AB, 21–26.ii.1980; 2♀♀ Malta forest, 15 km W Ofcolaco, 21.ii.1980; 4♀♀ 1♂ Blyde river canyon, 2430DB, 26–27.ii.1980; 1♀ Northam, 2527AB, 2.ii.1978; 1♀ Zoutpan [several such localities], 4–10.ii.1929; *North-West Prov:* 1♂ Sonop, 2527DA, 2.ii.1978; 1♀ Kangwane Reserve, 16.i.1992; TANZANIA: 1♀ 1? Kibweziw, 03° 21'S 36° 44'E, ii.1929; 1♀ Kibongoto, 3°10'S 37°05'E, 7.v.; 1♂ Bagamoy, 5° 15'S 38° 40'E, iii.1893; 1? Bondei, 5°54'S 39°14'E, i.1886; 1♀ Mazizini, 6°11'S 39°12'E, Zanzibar, 8.iii.1983; 3♀♀ Magagoni, 7°13'S 37°58'E, 18.vi.1962; 1♂ Mkulumuzi, 10°46'S 35°32'E, 1951; 1♀ Ruo Valley, 10°13'S 39°34'E, 7.iii.1913; 1♂ Morogoro [several such localities], 15.i.1917; 1♀ Mikindani [several such localities], 1897; 1♀ Salaum, 26.x.1898; 1♂ 1? Langenburg, Nyassa See, end.ii.–beginning.iii., 9–19.viii.1898; 3♀♀ 2?? no locality data; TOGO: 1♀ Bismarckburg, 8°11'N 0°41'E, 15–22.v.1893; UGANDA: 1♂ Ngora, 2°06'N 33°26'E, 15–16.xi.1948; 1♀ Semliki Plains, Lake Albert, 1°03'N 30°37'E, 25–27.xi.1911; 1♀ Fort Portal, 0°40'N 30°16'E, 20.x.1926; 5♂♂ Ankole Kichwamba, 0°43'N 30°11'E, 23–29.iv.1968, 1–5.v.1968; 1♀ Mubende, 0°35'N 31°22'E, 20.iv.1966; 1♀ 1? Kampala, 0°19'N 32°34'E, 26.xi.1917, 12.vi.1922; 2♀♀ Entebbe, 0°03'N 32°27'E, 12–20.ii.1912; 1♀ Lake George, 0°01'N 30°12'E, 17–19.x.1911; ZIMBABWE: 2♀♀ Victoria Falls, 17°55'S 25°50'E, 3.i.1920, xii.1938; 1? Umtali District, 18°57'S 32°40'E, 24.i.1932; 1♀ Sawmills, 19°35'S 28°01'E, 28.xii.1919; 1♀ 5♂♂ 1? Matopos National Park, 2028AD, i.1977; 1♂ 1? Bulawayo, 20°10'S 28°34'E, 20.ii.1921; 1? Lundi, 20°54'S 30°46'E, 13–16.iii.1964; COUNTRY UNKNOWN: 1♂ Upper Luangwa River, 27.vii.–13.viii.1910; 2♀ 1♂ no locality data. Depository: BMNH, Coll. Dikow, Coll. Geller-Grimm, CUIC, ISNB, MZLU, NMSA, USNM, ZMHB, ZMUC.

Remarks: This species is widely distributed on the African continent (Fig. 56) ranging from South Africa in the south to Kenya in the northeast and The Gambia in the northwest. Variation is evident in the colour of the sct, which is sometimes entirely black or only with 2 small antero-lateral red spots, or shows the characteristic pattern with the antero-lateral margin entirely orange and the remaining part black. Furthermore, the wings are sometimes entirely brown stained. The lectotype of *Leptogaster proculus* has apparently a black mystax and the anteriorly directing setae on the anepst are brown. I have seen these features only in three specimens and therefore, consider it not to be important for the diagnosis of the species. Janssens (1953: 6), however, described *E. procula* var. melanostoma from a single female specimen referring to the black mystax. Janssens did not consult the original description and did not examine the lectotype. Walker (1849: 482) explicitly referred to the black colour '…clypeus armed with short black bristles'. He stated unambiguously that var. melanostoma refers to an infrasubspecific entity and because the name was never adopted as valid for a species or subspecies the name melanostoma is unavailable referring to the International Code of Zoological Nomenclature (4th edition, Article 45.6.4. and 45.6.4.1.).

Euscelidia prolata sp. n.

Figs 36, 57E–H

Etymology: Latin adjective *prolatus* = elongated; refers to the elongated abdomen.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose, bluish-black sct and the elongated abdomen (wings reaching only T4).

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brown, setae white; oc tr apruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp brown, brown setae ventrally, white pruinose; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel hyaline.

Thorax: Black; ppro peg small, distinct, silver pruinose; sct predominantly apruinose, grey pruinosity restricted to margins, yellow setae with distinct alveoli scattered on surface, leaving median stripes and lateral spots uncovered; macrosetae: white, 1 npl s, 1 spal s; sctl grey pruinose, ds sctl s and sctl s long, white; *Legs* - yellow to brown; fem yellow, brown medially, meta fem pale yellow proximally, clubbed, club brown; tib brown, pale yellow stripe not reaching tip anteriorly; first tar yellow, brown distad, remaining tar brown, setae black; emp about a quarter of length of clw; *Wings* - hyaline; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; brown pruinose, lateral margins grey pruinose, T1 with long brown setae laterally, T2 in proximal third with white setae laterally, remaining T with short white and brown setae, S grey pruinose; ♂ *terminalia* Figs 57E–H - sur pointed distally, lobe ventrally; hypd bent upwards, slightly divided into 2 lobes; d aed shea short, lat pr aed short, extending gonp; lat apod simple.

Type material - The ♂ holotype is labelled ‘Ceylon [Sri Lanka], E. Prov. [Eastern Province] Stream 15 mls [24 km] SSW Batticaloa 8.III.62. [8.iii.1962] Loc. 123 / Dry meadow / Lund University Ceylon Expedition 1962 Brinck-Andersson-Cederholm / HOLOTYPE *Euscelidia prolata* sp. nov. det. T. Dikow 2001 (red label)’. The specimen is double mounted (minuten in block of foam), is in poor condition (antennae, abdomen, and most of the legs broken, abdomen attached to foam block; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the MZLU.

Two ♀♀ paratypes have same labels as holotype except ‘PARATYPE *Euscelidia prolata* sp. nov. det. T. Dikow 2001 (yellow label)’ are double mounted (minuten in block of foam), are in good to very good condition (one specimen with meso and meta legs broken), and are deposited in the MZLU.

Type locality and distribution (Fig. 36): Sri Lanka, Batticaloa, 7°42'N 81°41'E. Sri Lanka.

Euscelidia pulchra sp. n.

Figs 4C, F, 8B, 58A–G, 59

Etymology: Latin adjective *pulchra* = beautiful; refers to the attractive appearance of the species.

Diagnosis: The species is distinguished from congeners by the distinct alveoli on the sct, the pale yellow wing veins C, Sc, and R_1, and the specific shape of the meta fem (tubular in proximal 2/3 and distinctly clubbed in distal third).

Description: *Head:* Black; fc yellow pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brown-black, setae white; oc tr white pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp dark brown, white setae ventrally, white pruinose; ped dark brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose proximally and ventrally; apsel brown.

Thorax: Black; ppro peg small, distinct, silver pruinose; sct predominantly apruinose, yellow pruinosity restricted to anterior, lateral, and posterior margins, yellow setae with alveoli scattered on surface, leaving 2 narrow, median longitudinal stripes, fused after 1/3 of length and not reaching posterior margin, and 2 lateral spots, uncovered; macrosetae: white, 1 npl s, 1 spal s; sctl yellow pruinose, ds sctl s and sctl s long, yellow; *Legs* - yellow to brown; pro and meso fem yellow proximally, orange distally, setae white, meta fem in proximal 2/3 tubular, pale yellow, distal third distinctly clubbed, orange; pro and meso tib brown, yellow proximally, pale yellow stripe not reaching tip anteriorly, meta tib yellow in proximal half, distal half brown; first tar yellow, brown distad, remaining tar brown, setae black; emp about a third of length of clw; *Wings* - hyaline, very few microtrichia on remigium, veins yellow in proximal half of wing, brown distally, C, Sc, and R_1 completely pale yellow; ptero indistinct; cell d terminating in 3 veins; hlt orange.

Abdomen: Black; T brown pruinose medially, anterior, lateral, and posterior margins grey pruinose, T2 anteriorly with apruinose spot, T1 with long white setae laterally, T2 in proximal third with white setae laterally, remaining T with short white and yellow setae, S grey pruinose; ♂ *terminalia* Figs 58A–C, G - sur pointed distally, lobe dorsally and ventrally; hypd bent upwards; d aed shea tubular, medium length, v aed shea expanded to form a plate; lat apod bifurcated; ♀ terminalia illustrated in Figs 58D–F.

Type material - The ♂ holotype is labelled 'S AFRICA: Natal #9 Albert Falls Dam 29°28'S:30°22'E 720 m Date: 1.i.1994. Coll: J.G.H. Londt *Acacia* Grassland / HOLOTYPE *Euscelidia pulchra* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is double mounted (minuten in block of foam), is in excellent condition, and is deposited in the NMSA.

5♀♀ 5♂♂ paratypes are labelled 'S AFRICA: Natal #9 Albert Falls Dam 29°28'S:30°22E 720 m Date: 1.i.1994. Coll: J.G.H. Londt *Acacia* Grassland / PARATYPE *Euscelidia pulchra* sp. nov. det. T. Dikow 2001 (yellow label)'. The specimens are double mounted (minuten in block of foam), are in good to very good condition, and are deposited in the NMSA.

Type locality and distribution (Fig. 59): South Africa, KwaZulu-Natal, Albert Falls Nature Reserve, 29°28'S 30°22'E. Angola, Botswana, Kenya, Namibia, South Africa, Swaziland, Tanzania, Uganda.

Material examined: ANGOLA: 1♀ 1♂ Santa Clara, 7°22'S 14°43'E, 30.iii.–1.iv.1972; BOTSWANA: 1♀ Gaborone, 24°39'S 25°54'E, 9.i.1982; KENYA: 1♀ Voi, 3°22'S 38°33'E, 4–6.v.1991; 1♀ Mombasa, 4°02'S 39°40'E, 5.xii.1989; NAMIBIA: 2♀♀ 1♂ Grootfontein, 19°28'S 18°15'E, 21.iii.1984; 2♀♀ Otjiwarongo, 20°39'S 17°05'E, 20.iii.1984; 4♀♀ 7♂♂ Omuramba Omatako river, 21°05'S 17°15'E, 19.iii.1984; 1♂ Hochfeld, 21°18'S 17°56'E, 18.iii.1984; SOUTH AFRICA: *KwaZulu-Natal:* 1♀ 3♂♂

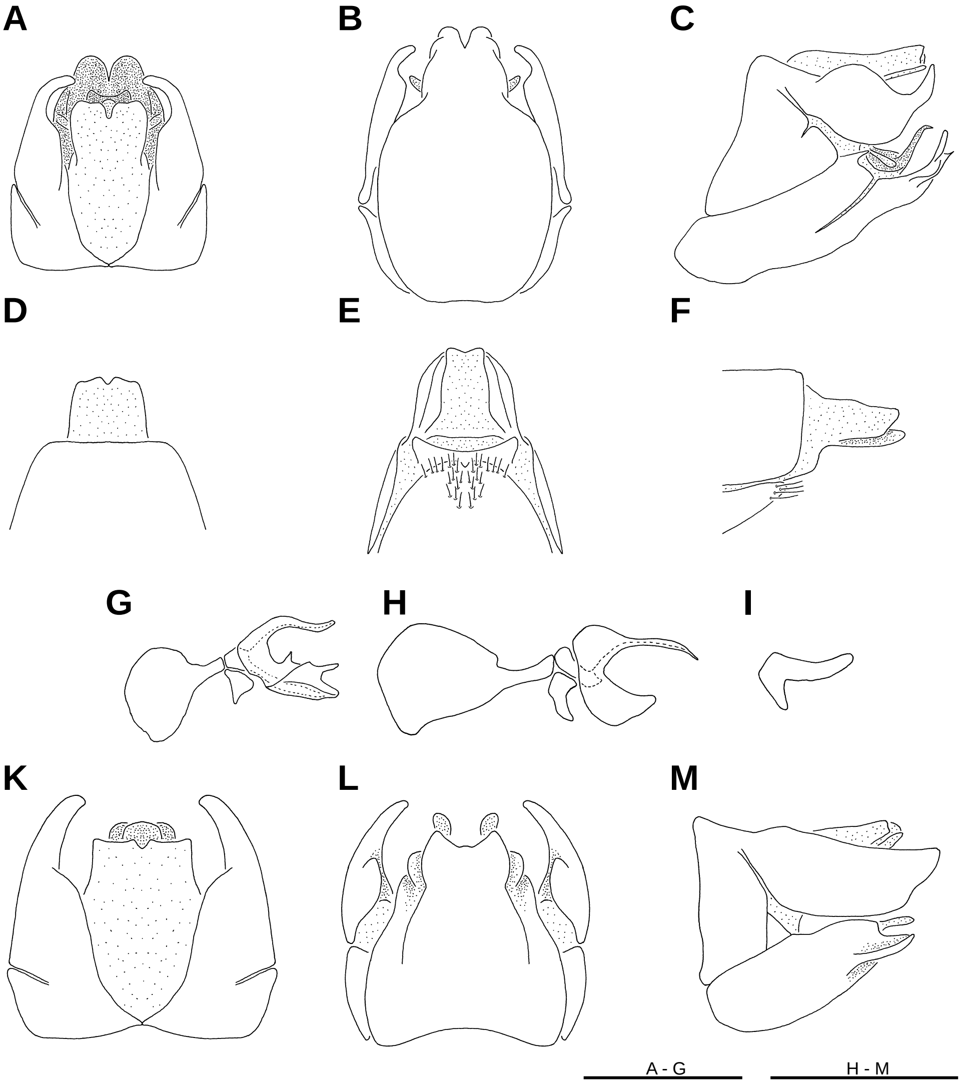

Fig. 58. ♀ and ♂ terminalia. A–G. *Euscelidia pulchra* sp. n. A. ♂ dorsal. B. ♂ ventral. C. ♂ lateral. D.♀ dorsal. E. ♀ ventral. F. ♀ lateral. G. Aedeagus lateral. H–M. *E. senegalensis* sp. n. H. Aedeagus lateral. I. Lateral apodeme posterior. K. Dorsal. L. Ventral. M. Lateral. Scale lines = 1 mm.

1? Kube Yini Game Reserve, 27°48'S 32°14'E, 10–14.i.1994; 1♀ 1♂ Empangeni, 2831DB, 26.ii.1984; 2♀♀ 3♂♂ 1? Nyala Park Reserve, 28°40'S 31°45'E, 16.xii.1980, 27.i.1982, 31.v.1983, 18.vi.1983, 14.iii.1993, 26.ii.1994; 1♀ Goudhoek, 28°23'S 31°05'E, 24.ii.1990; 1♀ Ntambana area, 28°35'S 31°45'E, 8.i.1986; 1♀ Hluhluwe Game Reserve, 28°01'S 32°16'E, xii.1990; 10♀♀ 8♂♂ 1? Harold Johnson Nature Reserve, 29°12'S 31°25'E, 27.i.1987, 3.ii.1988, 14.i.1994; 1♂ 2?? Albert Falls Nature Reserve, 29°28'S 30°22'E, 14.iii.1981, 1.i.1994; 1♀ 1♂ Richmond, 29°52'S 30°16'E, 7.v.1965;

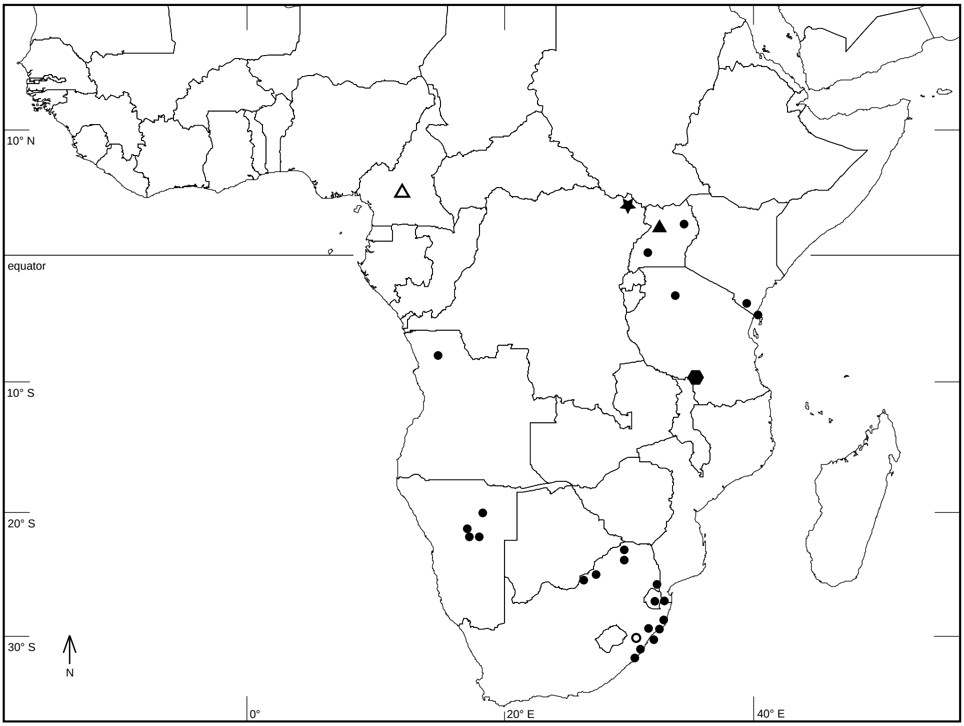

Fig. 59. Distribution. *Euscelidia adusta* sp. n., triangle; *E. atrata* sp. n., star; *E. picta* sp. n., hexagon; *E. pulchra* sp. n., circles.

1♀ 1♂ Cumberland Farm, 29°30'S 30°30'E, 13.iii.1990; 3♀♀ Umgeni Valley Reserve, 29°34'S 30°37'E, 10+15.i.1985, 16.i.1989; 1♀ 2♂♂ Ashburton, 29°38'S 30°24'E, 6.v.1984, 2.i.1989; 3♀♀ 1♂ 4?? Bisley Valley Nature Reserve, 29°39'S 30°23'E, 10.iv.1993, 22.xii.1993; 1♀ Bishopstowe, 2930CB, 11.ii.1981; 1♀ 1♂ Nhlavini, 30°33'S 30°04'E, 17.iii.1957; *Mpumalanga:* 1♀ Alldays, 2229CA, 25.i.1978; 1♀ 1♂ Capricorn Private Nature Reserve, 2329CB, 25.i.1978; 1♀ Kruger National Park, Skukuza, 2431DC, 9–12.iv.1985; *Northern Prov:* 1♀ 2♂♂ 2?? Marico, 24°13'S 26°54'E, ii.1918; SWAZILAND: 1♂ Ngogolo, 26°19'S 31°38'E, 22–24.iv.1991; 1♀ 2♂♂ 1? Lebombo flats, 2631BD, 26.ii.1971; TANZANIA: 1♂ Ukiriguru, 2°42'S 33°00'E, 30.iii.1962; UGANDA: 1♀ Alerek, 2°48'N 33°42'E, 12.viii.1958; 2♂♂ Kakabara, 0°32'N 30°56'E, 14.viii.1958. Depository: BMNH, MZLU, NMSA.

Remarks: Theodor (1976: 21) illustrated the female spermathecae and male terminalia of this species.

Euscelidia rapacoides Oldroyd, 1972

Fig. 60

Euscelidia rapacoides Oldroyd, 1972: 215 1975: 100; Joseph & Parui 1983: 278.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose sct and the densely arranged microtrichia on the wings. Since only two specimens are known definite identification is problematic.

Redescription: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; oc tr white pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp brown, brown setae ventrally; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel hyaline; *Thorax:* Black; sct predominantly apruinose, margins and 2 lateral stripes silver pruinose, white setae scattered on pruinose part, macrosetae: 1 black npl s, 1 white or black spal s; sctl silver pruinose, ds sctl s and sctl s long, yellow; *Legs* - yellow to brown; pro and meso fem orange proximally, brown distad, meta fem pale yellow proximally, distal half brown, clubbed; pro and meso tib brown, yellow stripe anteriorly, meta tib yellow proximally, remaining part brown, pale yellow stripe not reaching tip anteriorly; emp minute; *Wings* - densely covered with microtrichia, cell c and sc brown coloured, remaining cells light brown; ptero distinct, brown; cell d terminating in 3 veins; hlt light brown; *Abdomen:* (segments 1–5) Black; T predominantly brown pruinose, anterior and posterior margins grey pruinose, T1 with white setae, T2 with white setae laterally, remaining T with white or brown setae, S grey pruinose, S2 apruinose; ♂ *terminalia* - ♂♂ specimens unknown.

Type material - The holotype of undeterminable gender is labelled ‘PHILIPPINES: MOUNTAIN PROV., Abatan, Buguias 60 km S of Bontoc, 1800–2000 m, 27.V.1964 / H.M. Torrevillas Collector BISHOP Mus. / 76 / *Euscelidia rapacoides* sp. n det. H. Oldroyd 1971 HOLOTYPE (handwritten except for ‘det. H. Oldroyd 19’) / Bishop Museum Holotype No. No. 9669 (red label with black border)’. The specimen is double mounted (minuten in triangular piece of cardboard), is in poor condition (pped broken, abdomen broken, but attached to cardboard (not all segments present)), and is deposited in the BPBM.

The paratype of undeterminable gender is labelled ‘Paratype (circular label with yellow border) / PHILIPPINES: MOUNTAIN PROV., Abatan, Buguias 60 km S of Bontoc, 1800–2000 m, 25.IV.1964 / H.M. Torrevillas Collector BISHOP / ? not in Frey 1937 (handwritten) / *Euscelidia rapacoides* sp. n det. H. Oldroyd 1971 PARATYPE (handwritten except for ‘det. H. Oldroyd 19’)’. The specimen is double mounted (minuten in triangular piece of cardboard), is in poor condition (left pped and abdomen broken), and is deposited in the BMNH.

Type locality and distribution (Fig. 60): Philippines, Luzon Island, Abatan, 16°48’N 120°49'E. Philippines.

Remarks: The species is very similar to *E. marion*. More material from the Philippines is necessary to discuss a probable synonymy of the two species.

Euscelidia schoutedeni Janssens, 1954

Fig. 50

Euscelidia schoutedeni Janssens, 1954*b*: 401; Oldroyd 1980: 357.

Diagnosis: The species is distinguished, together with *nenemusha* and *schoutedeni*, from congeners by the overall brown colour, the predominantly apruinose sct, and the apruinose T8 in the ♀♀.

Redescription: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, 6 macrosetae; oc tr apruinose; occ silver pruinose, setae white; *Antennae* (pped

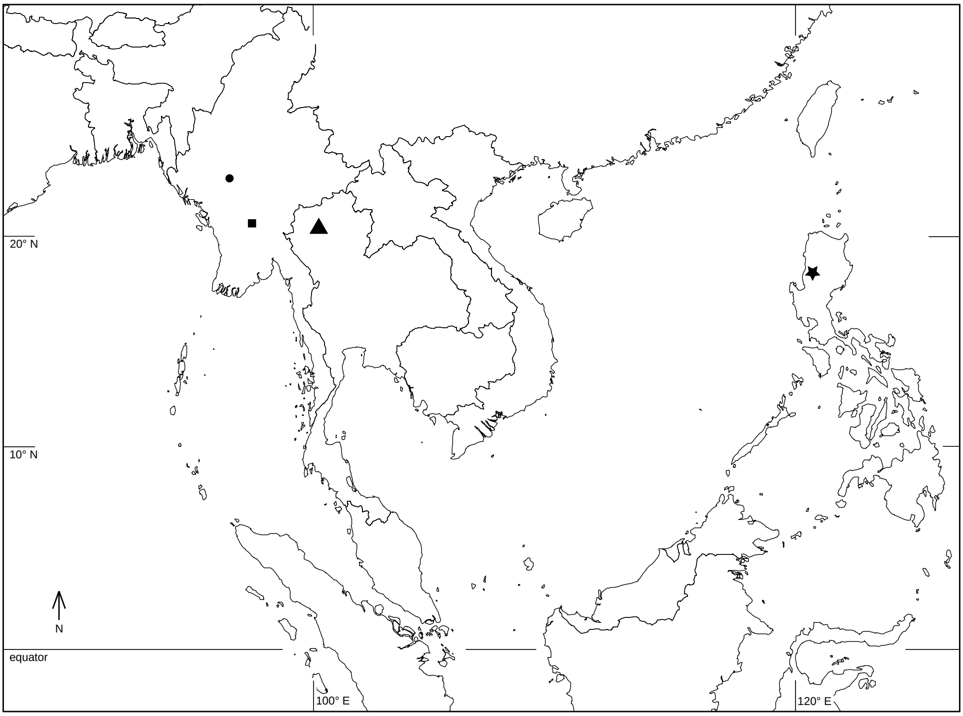

Fig. 60. Distribution. *Euscelidia lepida* sp. n., triangle; *E. livida* sp. n., square; *E. popa* sp. n., circle; *E. rapacoides*, star.

broken) - scp light brown, setae brown; ped brown, setae brown, white pruinose; *Thorax:* Brown; sct predominantly apruinose, anterior, lateral, and posterior margins silver pruinose, white setae on pruinose area, many long brown presut and psut dc s, macrosetae: brown, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s long, brown; *Legs* - yellow and light brown, fem yellow proximally, brown distad, tib brown, yellow stripe not reaching tip anteriorly; emp short; *Wings* - hyaline, brown stained; ptero distinct, brown; cell d terminating in 2 veins; hlt brown; *Abdomen:* Brown; T predominantly apruinose, lateral and posterior margins white pruinose, T1 with black setae, T2 with white long setae laterally, remaining T with short white setae; ♂ *terminalia* - ♂♂ specimens unknown.

Type material - The ♀ holotype is labelled ‘HOLOTYPUS (red label with black submarginal border) / MUSEE DU CONGO Haut-Uele. Moto Jun-1922 L. Burgeon (‘Jun’ handwritten) / R. DET. 5409 K. (‘K.’ handwritten; black submarginal border) / *Leptogaster* n. sp. Det. S. W. Bromley 19 (‘Leptogaster n. sp.’ handwritten; label folded) / TYPE (red label with black margin around ‘TYPE’) / R. DET. 6634 I. (‘I.’ handwritten) / E. Janssens det., 1952 *Euscelidia schoutedeni* E. Janssens (handwritten except for ‘E. Janssens det., 19’)’. The specimen is double mounted (minuten in block of foam), is in good condition (pped and left meso leg broken), and is deposited in the MRAC.

Type locality and distribution (Fig. 50): DR Congo, Haut Uele, Moto, 2°27'N 26°25'E. Cameroon, DR Congo.

Material examined: CAMEROON: 1♀ Ebolowa, 2°55'N 11°08'E, 28.ii.1984. Depository: NMSA.

Remarks: The species is only known from two female specimens. It is related to *castanea* and *nenemusha*, which are also only known from females. It is necessary to examine male specimens from the type localities of all three species to discuss a probable synonymy.

Euscelidia senegalensis sp. n.

Figs 3, 58H–M, 61

Etymology: Refers to the apparent distribution of this species in Senegal.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose sct, the yellow setae scattered on the sct, the densely arranged microtrichia on the wings, and features of the ♂ terminalia.

Description: *Head:* Black; fc yellow pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brown, setae white; oc tr apruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp brown, brown setae ventrally, white pruinose; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel brown.

Thorax: Black; ppro peg large, silver pruinose; sct predominantly apruinose, silver pruinosity restricted to anterior, lateral, and posterior margins, yellow setae scattered on sct; macrosetae: white, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s long, white; *Legs* - yellow to brown; fem light brown, meta fem pale yellow in proximal half, clubbed, club brown; tib light brown, brown stripe dorsally, pale yellow stripe not reaching tip anteriorly; first tar yellow, brown distad, remaining tar brown, setae black; emp about a quarter of length of clw; *Wings* - densely covered with microtrichia, veins brown; ptero indistinct; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; T grey pruinose, distal T more brown pruinose dorsally, T1 with long yellow setae laterally, T2 in proximal half with white setae laterally, remaining T with short white and yellow setae, S grey pruinose; ♂ *terminalia* Figs 58H–M - sur not sharply pointed distally, rounded, lobe ventrally; hypd ventral margin straight; d aed shea tubular, medium length; lat apod bifurcated.

Type material - The ♂ holotype is labelled 'SENEGAL, 2.5 KM ESE ZIGUINCHOR IN CULTIVATED AREA, AT LIGHT 20.00–21.30 [8 pm to 9.30 pm] 11.XI.1977 UTM 28PCJ6689. LOC. 32 / LUND UNIV. SYST. DEPT. SWEDEN - GAMBIA/SENEGAL NOV. 1977 – CEDERHOLM-DANIELSSON-HAMMARSETEDT-HEDQUIST-SAMUELSSON / HOLOTYPE *Euscelidia senegalensis* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is directly mounted, is in very good condition (left meta leg broken; ♂ terminalia attached to specimens pin in micro vial), and is deposited in the MZLU.

Three ♀♀ paratypes have the same locality label as holotype and 'PARATYPE *Euscelidia senegalensis* sp. nov. det. T. Dikow 2001 (yellow label)'. The are directly mounted, are in very good condition (one specimen right meta leg broken), and are deposited in the MZLU. Another ♀ paratype is labelled 'W-Africa: Senegal: 5 km W' Ziguinchor: Foret de Djibelor BARKEMEYER 5.10.1987 [5.x.1987] / PARATYPE

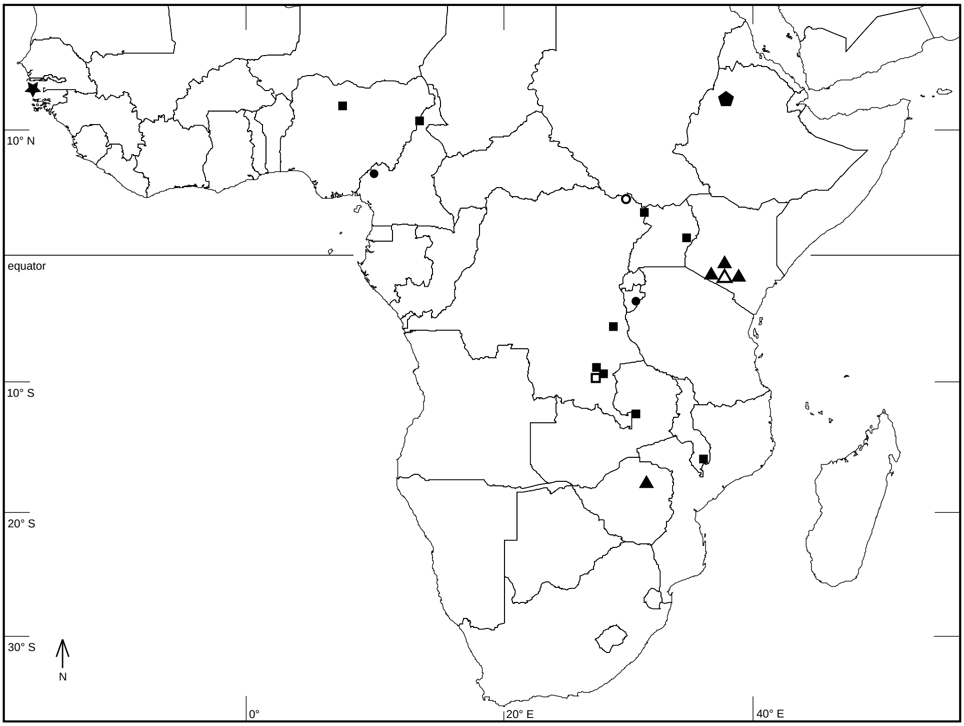

Fig. 61. Distribution. *Euscelidia erichthenii* sp. n., pentagon; *E. festiva*, squares; *E. moyoensis*, circles; *E. obtusa* sp. n., triangles; *E. senegalensis* sp. n., star.

Euscelidia senegalensis sp. nov. det. T. Dikow 2001 (yellow label)'. The specimen is directly mounted, is in very good condition, and is deposited in the NMSA.

Type locality and distribution (Fig. 61): Senegal, Ziguinchor, 12°34'N 16°17'W. Senegal.

Euscelidia splendida sp. n.

Figs 4E, G, 7E, 36, 62

Etymology: Latin adjective *splendidus* = bright, shining; refers to the apruinose, shiny scutum.

Diagnosis: The species is distinguished from congeners by the predominantly apruinose sct, the densely arranged microtrichia on the wings, and features of the ♂ terminalia (d aed shea dorso-ventrally flattened, medium length).

Description: *Head:* Black; fc silver pruinose, fc gib distinct, mystax white, many macrosetae; prob and plp brownish-black, setae white; oc tr apruinose; occ dorso-laterally apruinose, silver pruinose ventrally, setae white; *Antennae* - scp brown, brown setae ventrally; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose; apsel hyaline.

Thorax: Black; ppro peg small, distinct, silver pruinose; sct bluish-black, predominantly apruinose, margins silver pruinose, white and yellowish setae scattered on margins, few short white setae scattered on apruinose part; macrosetae:

white or black, 1 npl s, 1 spal s; sctl silver pruinose, ds sctl s and sctl s long, brown; *Legs* - yellow to brown; pro fem yellow, meso fem yellow proximally, remaining part brown, meta fem in proximal half pale yellow, clubbed, club in proximal 2/3 brown, distal third yellow, setae white; tib yellow proximally, remaining part brown, pale yellow stripe not reaching tip on meta tib anteriorly; first tar in proximal half yellow, brown in distal half, remaining tar brown, black setae; emp short, about a fifth of length of clw; *Wings* - densely covered with microtrichia, but wing only slightly brown; ptero distinct, brown; cell d terminating in 2 veins; hlt yellow.

Abdomen: Black; T predominantly brown pruinose, anterior, lateral, and posterior margins grey pruinose, T2 with grey pruinose ring medially, T1 with long yellow setae laterally, T2 in proximal half with few white setae laterally, remaining T with white and yellow setae, S grey pruinose; ♂ *terminalia* Fig. 62 - sur pointed distally, lobe ventrally; hypd ventral margin straight; d aed shea dorso-ventrally flattened, medium length, gonp on distal tip; lat apod simple.

Type material - The ♂ holotype is labelled ‘S. India: Karnataka. Mudigere area, c. 900 m 2–10.xi.1977 Zool. Mus. Copenhagen Exp. / HOLOTYPE *Euscelidia splendida* sp. nov. det. T. Dikow 2001 (red label)’. The specimen is directly mounted, is in excellent condition, and is deposited in the ZMUC.

10♀♀ 8♂♂ paratypes have same labels as holotype except ‘PARATYPE *Euscelidia splendida* sp. nov. det. T. Dikow 2001 (yellow label)’. The specimens are directly mounted (1♀ is double mounted with minuten in block of foam), are in good to excellent condition (the double mounted ♀ is in poor condition), and are deposited in the ZMUC.

Type locality and distribution (Fig. 36): India, Karnataka Province, Mudigere, 13°07'N 75°37'E. India.

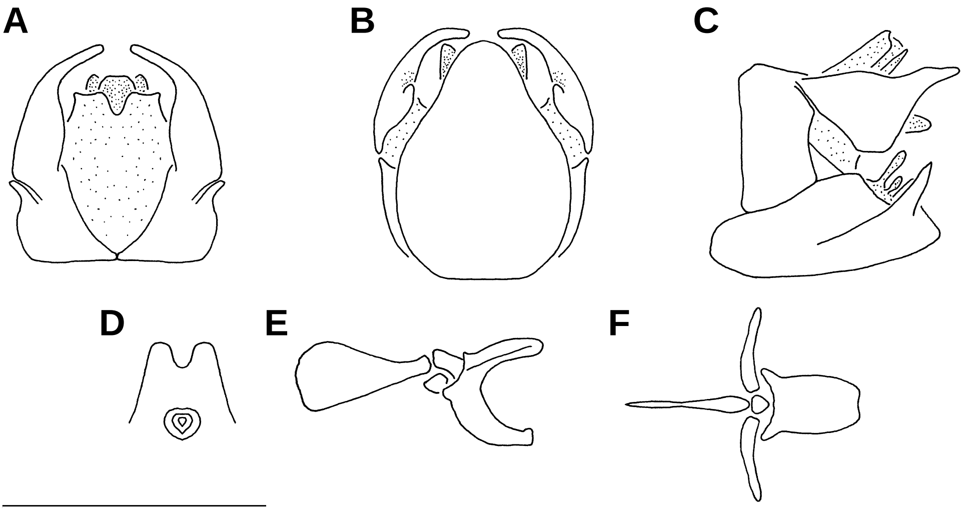

Fig. 62. ♂ terminalia of *Euscelidia splendida* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Hypandrium posterior. E. Aedeagus lateral. F. Aedeagus dorsal. Scale line = 1 mm.

Euscelidia trifoliata Janssens, 1953

Figs 29, 63

Euscelidia trifoliata Janssens, 1953: 4; Oldroyd 1980: 357.

Diagnosis: The species is distinguished from congeners by the three brown longitudinal stripes on the sct and features of the ♂ terminalia.

Redescription: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, few macrosetae; oc tr apruinose; occ silver pruinose, setae white and brown; *Antennae* - scp and ped light brown, setae brown, white pruinose; pped brown, white pruinose proximally; apsel brown; *Thorax:* Orange to brown; sct orange, 3 longitudinal stripes, median stripe not reaching posterior margin, lateral stripes originating medially, stripes fused distad, brown, margins silver pruinose, white setae on pruinose area, some white setae scattered on surface, macrosetae: white or brown, 1 npl s, 1 spal s, 1 pal s; sctl silver pruinose, ds sctl s and sctl s long, white or brown; *Legs* - yellow and light brown; fem brown, meta fem pale yellow proximally, clubbed; tib brown, yellow stripe, not reaching tip on meta tib, anteriorly; emp long, nearly a quarter of length of a clw; *Wings* - hyaline; ptero distinct, brown; cell d terminating in 2 veins; hlt yellow; *Abdomen:* Brown; T predominantly brown pruinose, anterior, lateral, and posterior margins grey pruinose, T2 apruinose proximally, T1 with black setae, T2 with white long setae laterally, remaining T with short white setae, S grey pruinose; ♂ *terminalia* Fig. 63 - sur pointed distally, lobe dorsally and ventrally; hypd ventral margin straight; (details of the aedeagus have not been studied).

Type material - The ♂ holotype is labelled ‘Urundi: Rumonge 17-IV-1949 780 m. F. Francois (date handwritten) / E. Janssens det., 1953 *Euscelidia trifoliata* n. sp. (handwritten except for ‘E. Janssens det., 19’) / TYPE (red label with black margin around ‘TYPE’) / cf. Bull. Sc. Nat. Belg. XXIX, 1953, no 42 p.4, fig. 3 (‘XXIX, 1953, no 42 p.4, fig. 3’ handwritten) / R. I. Sc. N. B. I. G. 20.102 (number handwritten)’. The specimen is double mounted (minuten in block of foam), is in poor condition (antennae, all right legs, and left wing broken; right wing and abdomen attached to foam block), and is deposited in the ISNB.

Type locality and distribution (Fig. 29): Burundi, Rumonge, 3°58'S 29°26'E. Burundi, Malawi.

Material examined: MALAWI: 1♀ Chikangawa, 1133Dd, 1700 m, 5–8.xii.1980. Depository: NMSA.

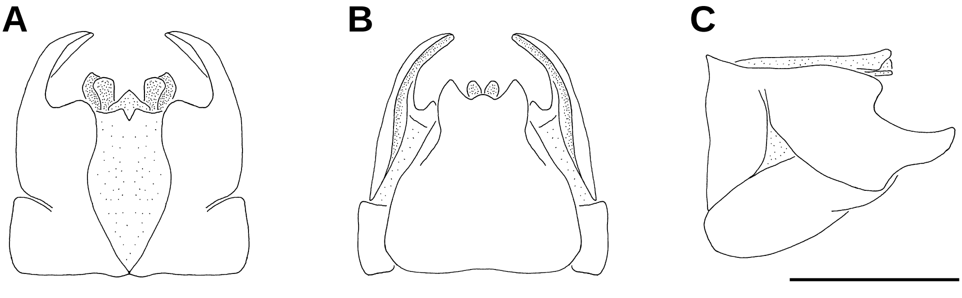

Fig. 63. ♂ terminalia of *Euscelidia trifoliata*. A. Dorsal. B. Ventral. C. Lateral. (aedeagus not examined) Scale line = 1 mm.

Euscelidia tsavo sp. n.

Figs 46, 64A–D

Etymology: Noun in apposition that refers to the type locality Tsavo National Park, Kenya.

Diagnosis: The species is distinguished from congeners by the short appressed brown and grey pruinosity on the sct, leaving only three lateral spots apruinose, and by features of the ♂ terminalia.

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brown to black, setae white; oc tr silver pruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp brown, white setae ventrally, white pruinose; ped brown, brown setae ventrally and dorsally, white pruinose; pped brown, white pruinose in proximal half and ventrally; apsel brown.

Thorax: Black; ppro peg large, silver pruinose; sct predominantly yellow pruinose, silver pruinose on margins, 2 circular antero-lateral spots, 2 triangular medio-lateral spots, and 2 triangular spots just posterior to trn sut apruinose, 2 narrow median stripes not reaching posterior margin sometimes apruinose too (not always distinct), short yellow and white setae on pruinose part; macrosetae: 1 white npl s, 1 black spal s; sctl silver pruinose, ds sctl s and sctl s short, brown; *Legs* - orange to brown; pro and meso fem yellow proximally, light brown distad, meta fem in proximal half pale yellow, clubbed, distal half of club brown, setae white; pro and meso tib light brown, pale yellow stripe anteriorly, meta tib proximally pale yellow, brown distad, pale yellow stripe not reaching tip anteriorly; first tar pale yellow, distad light brown, remaining tar brown, setae brown; emp minute; *Wings* - hyaline, but microtrichia scattered on remigium, margins, and along veins; ptero distinct, brown; cell d terminating in 2 veins; hlt light brown.

Abdomen: Black; T predominantly brown pruinose, anterior, lateral, and posterior margins grey pruinose, T2 in proximal half grey and in distal half brown pruinose, T1 with brown setae, T2 in proximal half with white setae laterally, remaining T with short yellow and brown setae, S grey pruinose; ♂ *terminalia* Figs 64A–D - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 lobes, sclerite just anterior to distal tip; d aed shea short, blunt; lat apod simple.

Type material - The ♂ holotype is labelled ‘KENYA Tsavo Mtito Andei 6.XII.1989 A. Freidberg & F. Kaplan / HOLOTYPE *Euscelidia tsavo* sp. nov. det. T. Dikow 2001 (red label)’. The specimen is double mounted (minuten in block of foam), is in excellent condition (♂ terminalia attached to specimens pin in micro vial), and is deposited in the NMSA.

A ♂ paratype is labelled ‘KENYA 20 mi. S. Mombasa 23–25.i.1968 Karl V. Krombein / PARATYPE *Euscelidia tsavo* sp. nov. det. T. Dikow 2001 (yellow label)’. The specimen is attached to a triangular piece of cardboard, is in excellent condition, and is deposited in the USNM. A ♂ paratype is labelled ‘RHODESIA Victoria Falls Nat’l. Park IV-3–6-1968 [3–6.iv.1968] Paul Spangler / PARATYPE *Euscelidia tsavo* sp. nov. det. T. Dikow 2001 (yellow label)’. The specimen is double mounted (minuten in block of foam), is in very good condition, and is deposited in the USNM. 1♀ 1♂ paratypes are labelled ‘KENYA: Baringo #64 Lake Bogoria Nat. Res. 00°11'N:36°08'E 1100 m South end 21.xi.1992 J Londt & A Whittington Fig Tree camp site / PARATYPE *Euscelidia tsavo*

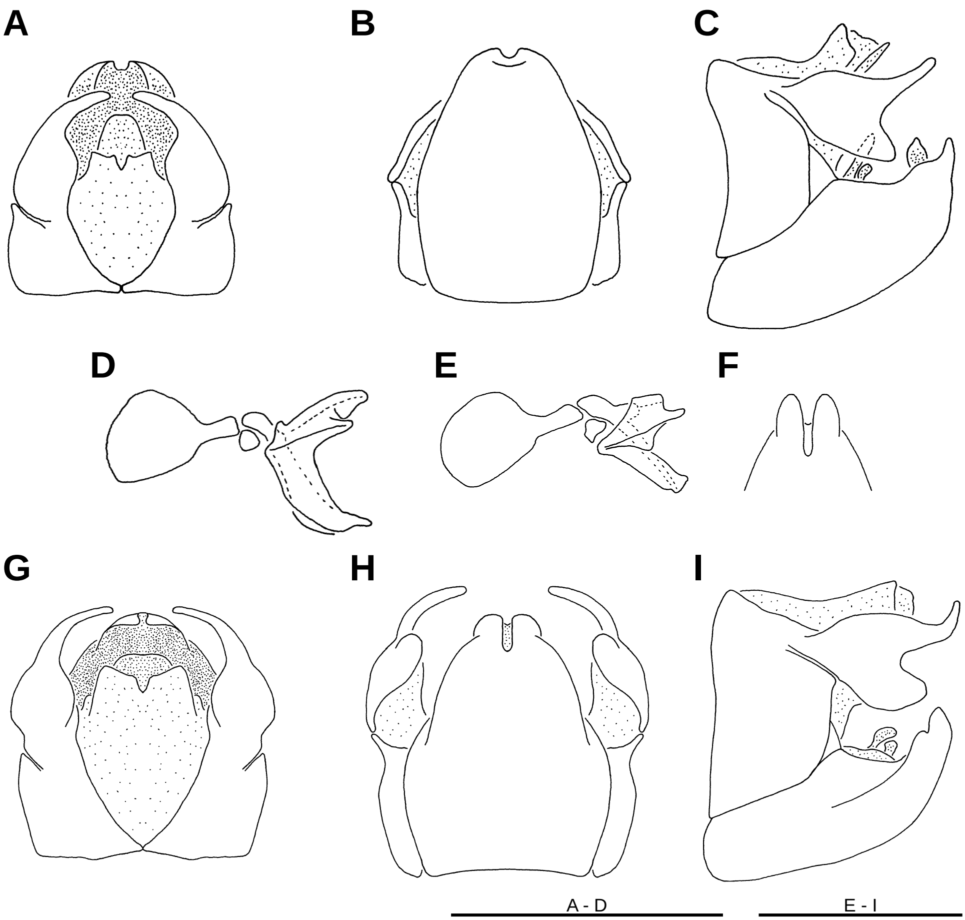

Fig. 64. ♂ terminalia. A–D. *Euscelidia tsavo* sp. n. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. E–I. *E. venusta* sp. n. E. Aedeagus lateral. F. Hypandrium posterior. G. Dorsal. H. Ventral. I. Lateral. Scale lines = 1 mm.

sp. nov. det. T. Dikow 2001 (yellow label)'. The specimens are double mounted (both specimens on one minuten in block of foam), are in very good condition, and are deposited in the NMSA.

Type locality and distribution (Fig. 46): Kenya, Tsavo National Park West, between Mtito Andei and Tsavo, 2°50'S 38°19'E. Kenya, Zimbabwe.

Euscelidia valida (Loew, 1858)

Figs 41, 65

Leptogaster validus Loew, 1858: 352; 1860: 99; Hull 1962: 300.
Euscelidia valida, Hermann 1926: 147; Oldroyd 1974: 20 1980: 357.

Diagnosis: The species is distinguished from congeners by the large size, distinct facial swelling, predominantly apruinose sct, and the densely arranged microtrichia on the wings.

Redescription: *Head:* Black; fc yellow pruinose, fc gib distinct, mystax white, many macrosetae; oc tr apruinose; occ silver pruinose, setae white; *Antennae* - scp brown, setae white; ped brown, setae brown, white pruinose; pped brown, white pruinose proximally; apsel light brown; *Thorax:* Black; sct predominantly black, 2 antero-lateral spots orange-red, transversal ridges distinct medially, lateral and posterior margins white pruinose, only few white setae scattered on anterior, lateral, and posterior margins, macrosetae: white, 1 npl s, 1 spal s, 1 pal s; sctl silver pruinose, ds sctl s and sctl s long, white; *Legs* - red-orange to brown; fem red-orange, meta fem pale yellow proximally, clubbed; tib brown, yellow stripe not reaching tip anteriorly; emp about a quarter of length of clw; *Wings* - proximal half with few microtrichia, distal half densely covered with microtrichia; ptero indistinct, light brown; cell d terminating in 2 veins; hlt light brown; *Abdomen:* Orange to black; T often orange on anterior and lateral margins, sometimes entirely black, grey pruinose, T1 with white setae, T2 with few white setae laterally, S grey pruinose; ♂ *terminalia* Fig. 65 - sur pointed distally, lobes dorsally and ventrally; hypd ventral margin straight; d aed shea tubular, hook-shaped; lat apod bifurcated.

Type material - The ♀ holotype is labelled '89. / 259 / 80 52 (red label) / *Leptogaster validus* / HOLOTYPE *Leptogaster validus* Loew, 1858 by T. Dikow 2001 (red label)'. The specimen is directly mounted, is in good condition (met legs broken), and is deposited in the NHRS.

Type locality and distribution (Fig. 41): South Africa, 'Caffraria', no co-ordinates available. The type specimens were collected by Wahlberg, who travelled in south-eastern South Africa (Usher 1972). Kenya, Mali, Nigeria, South Africa, Tanzania, Zambia, Zimbabwe.

Material examined: KENYA: 1♀ Mombasa, 4°03'S 39°40'E, 21.xi.1994; MALI: 2?? Tillembeya, 14°09'N 4°59'W, 20.ix.1944; NIGERIA: 3♀♀ 3♂♂ 1? Yakawada, 11°16'N

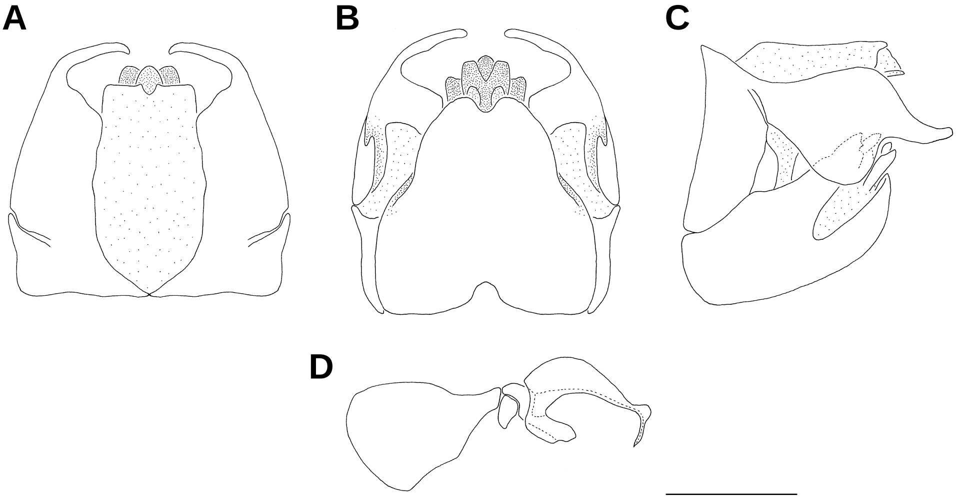

Fig. 65. ♂ terminalia of *Euscelidia valida*. A. Dorsal. B. Ventral. C. Lateral. D. Aedeagus lateral. Scale line = 1 mm.

7°32'E, 15.vii.1972; 1♂ Samaru, 11°10'N 7°37'E, 14–15.vii.1970; SOUTH AFRICA: *Eastern Cape Prov:* 1♀ 1♂ Platrivier, 32°35'S 24°53'E, 1.ii.1903; *KwaZulu-Natal:* 1♂ Mkuze Game Reserve, 27°36'S 32°13'E, 2–4.ii.1994; TANZANIA: 3♀♀ Tarangire National Park, 3°50'S 36°10'E, 16+22.iii.1995; 1♀ Linda, 11°19'S 34°50'E, 21–31.i.1936; ZAMBIA: 1? Mweru-Wantipa, 8°41'S 29°23'E, 1.ii.1944; ZIMBABWE: 1♂ Matopos National Park, 2028AD, i.1977. Depository: AMNH, BMNH, Coll. Geller-Grimm, ISNB, NHMW, NMSA, USNM, ZMHB.

Euscelidia venusta sp. n.

Figs 41, 64E–I

Etymology: Latin adjective *venustus* = beautiful, elegant; refers to the beautiful appearance.

Diagnosis: The species is distinguished from congeners by the orange-red anterior margins on the sct, few microtrichia on the wings, and features of the ♂ terminalia (hypd bent upwards, d aed shea with two short lat pr aed, lat apod bifurcated).

Description: *Head:* Black; fc silver pruinose, fc gib indistinct, mystax white, many macrosetae; prob and plp brown-black, setae white; oc tr apruinose dorsally; occ silver pruinose, setae white; *Antennae* - scp brown, without setae, white pruinose; ped brown, brown setae ventrally and dorsally, white pruinose; pped light brown, white pruinose proximally and ventrally; apsel brown.

Thorax: Predominantly orange-red; ppro peg large, silver pruinose; sct orange-red, white pruinose, longitudinal stripe medially, not reaching posterior margin, and 2 lateral longitudinal stripes, originating medially not reaching posterior margin, black, black stripes and a spot anterior to lateral stripes apruinose, white setae on lateral and posterior margins; macrosetae: black, 1 npl s, 1 spal s; sctl white pruinose, ds sctl s and sctl s long, brown; *Legs* - yellow to brown; fem proximally yellow, brown distally, setae white, meta fem clubbed, club brown ventrally and dark brown dorsally; pro and meso tib brown, yellow stripe not reaching tip anteriorly, meta tib laterally brown, yellow stripes not reaching tip anteriorly and posteriorly; first tar yellow proximally, brown distad, remaining tar brown, setae black; emp minute; *Wings* - hyaline, brown stained, few microtrichia in distal half, veins brown; ptero distinct, brown; cell d terminating in 2 veins; hlt brown.

Abdomen: Black; T predominantly brown pruinose, anterior, lateral, and posterior margins grey pruinose, T2 with apruinose ring medially, T1 with long brown setae laterally, T2 in proximal third with white setae laterally, remaining T with short white and yellow setae, S1 apruinose in proximal half, remaining S apruinose proximally, grey and light brown pruinose distally; ♂ *terminalia* Figs 64E–I - sur pointed distally, lobe ventrally; hypd bent upwards, divided into 2 short lobes; lat pr aed short; lat apod bifurcated.

Type material - The ♂ holotype is labelled 'SOUTH AFRICA: Natal False Bay Park Res. ca 27°58'S:32°22'E Sand Forest J. Londt 23–24.iv.1988 40 m Mpophomeni Trail area / HOLOTYPE *Euscelidia venusta* sp. nov. det. T. Dikow 2001 (red label)'. The specimen is double mounted (minuten in block of foam), is in very good condition, and is deposited in the NMSA.

3♀♀ 8♂♂ 1? paratypes have same labels as holotype except ‘PARATYPE *Euscelidia venusta* sp. nov. det. T. Dikow 2001 (yellow label)’. All specimens are double mounted (minuten in block of foam), are in good to very good condition, and are deposited in the NMSA.

Type locality and distribution (Fig. 41): South Africa, KwaZulu-Natal, False Bay Park, ca. 27°58'S 32°22'E. Kenya, South Africa, Zimbabwe.

Material examined: KENYA: 1♀ Godoni forest, 4°19'S 39°25'E, 19.viii.1975; 1♀ Tiwi beaches, 0°14'S 39°36'E, 14–23.viii.1975; ZIMBABWE: 1♂ Matopos National Park, 20°33'S 28°30'E, 1–2.iv.1968. Depository: USNM, ZMUC.

Remarks: This species has a very large distribution. The Kenyan material are only females, however, I am confident that these specimens belong to this species. Male specimens are necessary to verify this distribution.

Euscelidia zumpti Janssens, 1957

Fig. 22

Euscelidia zumpti Janssens, 1957: 3; Oldroyd 1974: 20 1980: 357.

Type material - The ♂ holotype has to be considered lost. Janssens stated that the type is deposited in the South African Institute for Medical Research, Pretoria, South Africa. The collection is now part of the NMSA, but the specimen could not be found there. The concept of *zumpti* remains unclear and a neotype designation is not possible at this stage.

Type locality (Fig. 22): South Africa, Mpumalanga, Sabie, 25°05'S 30°46'E.

Remarks: Identification of this species is very difficult because it is probably part of the *brunnea* species-group, in which species are mainly distinguished by characters of the aedeagus. Oldroyd (1974: 22), while working on the southern African Asilidae fauna, discussed the point that there is ‘… a complex of small specimens that might fit the description of *zumpti*, including the drawing of the male genitalia’. The original description is not very comprehensive in providing details useful to distinguish *zumpti* from other species. The new species, *notialis* sp. n. and *vallis* sp. n., might fit the description in part, but they can only be distinguished by the shape of the dorsal aedeagal sheath. The drawing of the ♂ terminalia provided by Janssens does not show the aedeagus in detail. *E. longibifida* sp. n. has a very different aedeagus (it is not part of the *brunnea* species-group), but looks very similar to the mentioned species. Therefore, even a discussion of the relationship of *zumpti* to one of the species of the *brunnea* species-group with an open, sheath-like dorsal aedeagal sheath is not possible. In *notialis* sp. n., *vallis* sp. n., and *longibifida* sp. n. the wings are densely covered with microtrichia, a feature mentioned in the original description of *zumpti*. An additional feature mentioned by Janssens, namely the dull black sct, is a characteristic feature of *brunnea*, however, the wing of *brunnea* is not densely covered with microtrichia. The sct of *notialis* sp. n., *vallis* sp. n., and *longibifida* sp. n. is not dull black but densely covered with greyish pruinosity. This shows that it is difficult to identify the species without having studied the type specimen. I did not examine specimens from the type locality, which is plotted in Fig. 22 together with other species probably closely related to *zumpti*, and I am not in the position to make further comments about this species.

Identification key to species of *Euscelidia*

Note: not included are *discors*, *gutianensis*, *rapacoides*, and *zumpti*. Specimens of *rapacoides* key out as *marion*, but because ♂ terminalia remain unknown they cannot be separated in the key (the restricted distribution of *rapacoides* in the Philippines might help in identifying this species). For the other three species no specimens have been examined and the concepts of the species remain uncertain. The comparative character matrix provided in Table 3 can assist in identifying species using few diagnostic features.

1 Mystax consists of many macrosetae (usually more than 20), arranged in a number of rows dorsally on lower facial margin **21**
– Mystax consists of few macrosetae (usually no more than 10, sometimes 12), arranged in 1 row dorsally on lower facial margin **2**

2 Cell d with no or only few microtrichia **6**
– Cell d densely covered with microtrichia **3**

3 Sct predominantly apruinose, pruinosity restricted to margins; anepm with many, long, densely arranged setae directing anteriorly **5**
– Sct entirely pruinose; anepm with only few, short setae directing anteriorly **4**

4 Mystax nearly as long as prob; continental Africa; ♂ terminalia Fig. 30 .... ***dorata***
– Mystax about 3/4 of length of prob; Madagascar; (♂♂ unknown) .... ***fastigium***

5 Scutal pruinosity restricted to posterior margin and dorsal to wing base; wing dark brown; pro and meso fem and tib brown; ♂ terminalia Figs 12E–H .... ***anthrax***
– Scutal pruinosity on anterior, lateral, and posterior margins; wing light brown; pro and meso fem and tib yellow; ♂ terminalia Figs 33A–E .... ***festiva***

6 Sct predominantly pruinose, only median stripes and/or lateral spots/stripes apruinose **13**
– Sct predominantly apruinose (pruinosity restricted to margins) **7**

7 Sctl with only short ds sctl s and sctl s (♂♂ unknown) .... ***nenemusha***
– Sctl with long ds sctl s and sctl s **8**

8 Sct with long brown presut and psut dc s (♂♂ unknown) .... ***schoutedeni***
– Sct without such long dc s **9**

9 Sct entirely brown or black, or with only orange spots antero-laterally **11**
– Sct orange to light brown, with 3 dark brown longitudinal stripes (lateral stripes not reaching anterior margin) **10**

10 Emp long, about a fifth of length of clw; ♀ T8 entirely pruinose; ♂ terminalia Fig. 63 .... ***trifoliata***
– Emp minute; ♀ T8 apruinose; ♂ terminalia Fig. 39 .... ***hyalina***

11 Emp minute; ♂ terminalia Figs 52A–D .... ***obudu***
– Emp short to about a quarter of length of clw **12**

12 Sct brown (♂♂ unknown) .... ***castanea***
– Sct black; ♂ terminalia Figs 5D–F, 7C, 13F–K .... ***bequaerti***

13 Pped short, as short as scp and ped combined (Fig. 9A); ♂ terminalia Fig. 10; Oriental .... ***abbreviata***
– Pped long, distinctly longer than scp and ped combined **14**

14 T2 with apruinose spot dorsally **17**
– T2 entirely pruinose **15**

15 Fc gib distinct (lateral view); ♂ terminalia Figs 24E–I; Afrotropical .... ***crena***
– Fc gib indistinct Fig. 3 .... **16**

16 Sct entirely black; sct with broad median apruinose stripe and 2 lateral apruinose spots; ♂ terminalia Figs 44A–D; Oriental .... ***lepida***
– Sct orange antero-laterally, remaining part black; sct with only 2 lateral apruinose spots (medially pruinose); ♂ terminalia Fig. 54; Afrotropical .... ***picta***

17 Sct brown; sub-Saharan Africa **19**
– Sct black; north-eastern Africa (Egypt, Eritrea, Sudan) **18**

18 Wing brown stained; ♂ terminalia Figs 17A–D .... ***bishariensis***
– Wing hyaline, without any staining; ♂ terminalia Figs 51A–D .... ***nitida***

19 Sct predominantly pruinose; ♂ terminalia Figs 12A–D .... ***adusta***
– Scutal pruinosity restricted to 3 distinct longitudinal stripes and to margins **20**

20 Emp short; ♂ terminalia Figs 45A–D .... ***lucida***
– Emp minute; ♂ terminalia Figs 45E–I .... ***lucioides***

21 Cell d densely covered with microtrichia **40**
– Cell d with no or only few microtrichia **22**

22 All wing veins brown (sometimes yellow proximally) **24**
– Wing veins C, Sc, and R_1 completely pale yellow **23**

23 Meta tib and tar 1–4 with densely arranged long brown setae laterally; meta fem only in proximal half tubular and only slightly and smoothly clubbed in distal half; ♂ terminalia Fig. 35 .... ***francoisi***
– Meta tib and tar without such setae; meta fem in proximal 2/3 tubular and suddenly distinctly clubbed in distal third; ♂ terminalia Figs 58A–C, G .... ***pulchra***

24 Scutal pruinosity leaving only median stripes and/or lateral spots/stripes apruinose **28**
– Scutal pruinosity restricted to anterior, lateral, and posterior margins **25**

25 Emp minute; ♂ terminalia Fig. 38 .... ***hesperia***
– Emp about a quarter of length of clw **26**

26 Sct antero-laterally orange (sometimes only small red spots present); wings brown stained; ♂ terminalia Figs 57A–D; Afrotropical widespread .... ***procula***
– Sct entirely bluish-black; wings not brown stained; Oriental **27**

27 Small species; abdomen of typical shape - wings reaching T7; ♂ terminalia Fig. 37 .... ***glabra***
– Large species; abdomen elongated - wings reaching only T4; ♂ terminalia Figs 57E–H .... ***prolata***

28 Hypd ventral margin straight (not bent upwards) Fig. 43C; d aed shea forming a closed tube Fig. 43D; Oriental .... ***livida***
– Hypd bent upwards e.g. Fig. 31C; d aed shea not forming a closed tube e.g. Figs 6, 18; Afrotropical **29**

29 D aed shea short, either blunt or lat pr aed extending gonopore e.g. Figs 6, 32 . **32**
– D aed shea open (extending gonopore) Fig. 18 .... **30**

30 Sct orange antero-laterally, remaining part black; ♂ terminalia Figs 18, 23 .... ***ochricornis***
– Sct entirely black or bluish-black **31**

31 D aed shea as in Fig. 21G .... ***cana***
– D aed shea as in Fig. 21F .... ***brunnea***

32 T2 with apruinose spot dorsally; ♂ terminalia Figs 64E–I .... ***venusta***
– T2 entirely pruinose **33**

33 Hypd in posterior view not particularly pointed Fig. 51I **35**
– Hypd in posterior view pointed Fig. 11F **34**

34 ♂ terminalia Figs 11F–K; Namibia .... ***acuminata***
– ♂ terminalia Fig. 55; Botswana .... ***pipinna***

35 Surstylus with distinct dorsal lobe Figs 11A, C, 51G, I **39**
– Surstylus without a dorsal lobe, only slightly convex e.g. Figs 64A, C **36**

36 Sct with only a single, large apruinose spot/stripe laterally **38**
– Sct with 3 apruinose spots arranged in a longitudinal line laterally (anterior spot circular; other spots of varying shape situated just anterior and posterior to transverse suture) **37**

37 ♂ terminalia Figs 64A–D; Kenya .... ***tsavo***
– ♂ terminalia Figs 13A–E; Botswana .... ***bechuana***

38 Hypd with 2 long lobes distally Fig. 31B; no distinct sclerite anterior to these lobes Fig. 31C .... ***erichthenii***
– Hypd with only 2 short lobes distally Fig. 15D; distinct sclerite anterior to these lobes Fig. 15C .... ***bicolor***

39 Hypd in posterior view divided, forming 2 short separated lobes Fig. 11D; no lat pro aed developed Fig. 11E ....***peteraxi***
– Hypd in posterior view not divided Fig. 51I; lat pr aed present, extending gonopore Fig. 51E, F .... ***obtusa***

40 Scutal pruinosity restricted to anterior, lateral, and posterior margins **52**
– Scutal pruinosity leaving only median stripes and/or lateral spots/stripes apruinose **41**

41 Emp minute **44**
– Emp about a third of length of clw; Oriental **42**

42 Colour of scutal and anepisternal pruinosity grey; T2 with apruinose spot dorsally; ♂ terminalia Figs 24A–D .... ***cobice***
– Colour of scutal and anepisternal pruinosity yellow or gold; T2 entirely pruinose **43**

43 R_{2+3} bent anteriorly and R_4 bent posteriorly (distal tip of cell r_2 widened); overall pruinosity gold; (♂♂ unknown); Myanmar .... ***popa***
– R_{2+3} bent anteriorly but R_4 distally straight (distal tip of cell r_2 only anteriorly widened); overall pruinosity yellow; ♂ terminalia Fig. 34; Sri Lanka .... ***flava***

44 Wing in proximal half dark brown stained; ♂ terminalia Figs 52E–H; Palaearctic .... ***pallasii***
– Wing not particularly darkened **45**

45 Sct covered with long erect brown setae; ♂ terminalia Fig. 21H .... ***capensis***
– Sct without long erect setae **46**

46 Scutal pruinosity medially dense, only 2 narrow apruinose stripes may be present **48**
– Scutal pruinosity leaving a distinct broad median stripe apruinose **47**

47 ♂ terminalia Figs 48A–E; Oriental .... ***marion***
– ♂ terminalia Figs 21A–E; Afrotropical .... ***natalensis***

48 Proximal half of meta fem pale yellow and distal half dark brown; meso fem dark brown in distal half; hypd bent upwards but not divided into lobes (posterior view) Fig. 42D, ♂ terminalia Figs 42 A–E .... ***kasungu***
– Meta fem proximally pale yellow and only light brown distally (not clearly dark brown in distal half); meso fem only yellow or light brown in distal half; hypd bent upwards and divided into 2 lobes (posterior view) e.g. Figs 44F, 49D **49**

49 Lobes on hypd in posterior view broadly separated Fig. 44F; lat pr aed long, far extending gonopore Fig. 6D .... ***longibifida***
– Lobes on hypd in posterior view close together Fig. 20F or short and pointed Fig. 49D; d aed shea short and blunt Fig. 49E or open and sheath-like Fig. 20G **50**

50 D aed shea short and blunt Fig. 49E .... ***mucronata***
– D aed shea open and sheath-like Fig. 20G **51**

51 Lat pr aed as in Fig. 20G .... ***notialis***
– Lat pr aed as in Fig. 21I .... ***vallis***

52 Emp minute or very short **57**
– Emp about a fifth to a third of length of clw **53**

53 Apruinose part of sct covered with yellow setae; ♂ terminalia Figs 58H–M .... ***senegalensis***
– Apruinose part of sct with only few scattered yellow setae **54**

54 Sct with only few long yellow setae on margins **56**
– Sct with long yellow setae on anterior, lateral, and posterior margins **55**

55 ♂ terminalia Figs 17E–H; Angola .... ***cacula***
– ♂ terminalia Fig. 40; DR Congo .... ***insolita***

56 Small species; fc gib indistinct; emp about a fifth of length of clw; ♂ terminalia Fig. 62; Oriental .... ***splendida***
– Large species; fc gib distinct in lateral view; emp about a third of length of clw; ♂ terminalia Fig. 65; Afrotropical .... ***valida***

57 Apruinose part of sct covered with yellow setae **59**
– Apruinose part of sct with only few yellow or brown setae **58**

58 Pro and meso fem yellow; wings light brown; ♂ terminalia Figs 33F–K ... ***fistula***
– Pro and meso fem dark brown; wings dark brown; ♂ terminalia Figs 20A–E .... ***atrata***

59 Sur not bent inwards distally, forming a pointed lobe Fig. 48G; sur with lobe ventrally Fig. 48I .... ***moyoensis***
– Sur bent sharply inwards distally e.g. Fig. 28G; sur without a lobe ventrally e.g. Fig. 28I .... ***datis*** species-group **60**

60 Hypd in lateral view proximally enlarged ventrad Fig. 27F .... ***rapax***
– Hypd in lateral view only slightly rounded e.g. Figs 28C, F **61**

61 Dorsal margin of face with long setae, directing ventrally from antennal base (sometimes short or even missing); tip of d aed shea as in Fig. 27G; hypd in ventral view with large membranous area Fig. 27B .... ***artaphernes***
– Face without such long, ventrally directed setae; tip of d aed shea not as in Fig. 27G; hypd in ventral view not as in Fig. 27B **62**

62 D aed shea distally pointed Fig. 28H .... ***datis***
– D aed shea distally not sharply pointed, different structures present **63**

63 Tip of d aed shea as in Fig. 28K, L .... ***lata***
– Tip of d aed shea as in Fig. 28M .... ***milva***

DISCUSSION

The following section deals with those species that have been assigned to *Euscelidia* by various authors in catalogues and publications, but belong to *Leptogaster*.

Leptogaster piliensis (Oldroyd, 1972), **comb. n.**

Euscelidia piliensis Oldroyd, 1972: 215; Joseph & Parui 1983: 278.

Type material - The holotype of undeterminable gender is labelled ‘P. I.: LUZON CAMARINES SUR Mt. Isarog, Pili 600 m, 15.IV.1965 / H. M. Torrevillas Collector BISHOP / 77 / Not same as that figured as setifer antennae 3 shape of scutum (handwritten) / *Euscelidia piliensis* sp. n det. H. Oldroyd 1971 HOLOTYPE (handwritten except for ‘det. H. Oldroyd 19’) / Bishop Museum Holotype No. No. 9668 (red label with black margin) / *Leptogaster piliensis* (Oldroyd, 1972) det. T. Dikow 2001’. The specimen is directly mounted, is in poor condition (right pped, all left tarsi, and abdomen broken, thorax cracked), and is deposited in the BPBM.

A ♀ paratype is labelled ‘P. I.: Luzon CAMARINES SUR Mt. Isarog, Pili 600 m, 15.IV.1965 / H. M. Torrevillas Collector BISHOP / *Leptogaster piliensis* (Oldroyd, 1972) det. T. Dikow 2001’. The specimen is double mounted, is in good condition, and is deposited in the BMNH.

Type locality: Philippines, Luzon Island, Mount Isarog National Park, Mt. Isarog (600 m), 13°39'N 123°22'E.

Remarks: The species does not belong to *Euscelidia*. There is a minute vertical cylindrical structure on the pronotum that is similar to the ppro peg found in *Euscelidia*, but I consider this not homologous with the feature described and illustrated above (Fig. 3). Oldroyd’s drawing (1972: 213, Fig. 9) of the ♂ terminalia shows also a shape never found in *Euscelidia* (sur with two equally developed lobes that are separated proximally).

Leptogaster setifer Frey, 1937, **stat. rev.**

Leptogaster setifer Frey, 1937: 42; Hull 1962: 300.
Euscelidia setifer, Oldroyd 1975: 100; Joseph & Parui 1983: 278.

Type material **-** The two ♂♂ syntypes are labelled 'Philipp. [Philippines] Dapa Okt-Nov 1916 [xi.–.xii.1916] / Spec. typ. No. (red label) / Mus. Zool. H [Helsinki] :fors Spec. typ. No. 8509 (8510 respectively) *Leptogaster setifer* Frey (number and species name handwritten)'. The specimens are directly mounted, are in good condition, and are deposited in the MZHF.

Type locality: Philippines, Siargao Island, Dapa, 9°45'N 126°03'E.

Remarks: *Leptogaster setifer* was listed as a representative of *Euscelidia* in different catalogues or publications (Oldroyd 1975, Joseph & Parui 1983). The species does not belong to *Euscelidia*. There is no ppro peg developed.

Leptogaster simplex Bigot, 1878, **stat. rev.**

Leptogaster simplex Bigot, 1878: 444; Hull 1962: 300.
Euscelidia simplex, Oldroyd 1975: 100; Joseph & Parui 1983: 278 1990: 10 1998: 19.

Type material **-** The ♂ holotype is labelled 'Holotype (circular label with red submarginal border) / *L. simplex* ♂ Ceylon J. Bigot (black submarginal border) / Type Dip: 409 *Leptogaster simplex* Bigot Hope Dept. Oxford (black submarginal border)'. The specimen is directly mounted, is in good condition, and is deposited in the OXUM.

Type locality: Sri Lanka, no exact locality.

Remarks: *Leptogaster simplex* was listed as a representative of *Euscelidia* in different catalogues or publications (Oldroyd 1975; Joseph & Parui 1983 1990 1998). This species does not belong to *Euscelidia*. The synapomorphic feature for all species of *Euscelidia*, the ppro peg, is not present. The pronotum is slightly excavated, but this is not homologous with the ppro peg described and illustrated above (Fig. 3). Oldroyd (1972: 212) mentioned this point already, however he listed the species in the Oriental catalogue (Oldroyd 1975) as *Euscelidia*. Furthermore, the male terminalia have a shape never found in species of *Euscelidia* (sur with two equally developed lobes that are separated proximally).

Biology and ecology

Londt (1994) summarised data on the biology, ethology, and ecology of Afrotropical Asilidae. His findings for species of *Euscelidia* are listed here. His observations showed that species were generally found to perch on tips of grass stalks, shrubs, bushes, and tree twigs.

Habitat grassland: species '… perch at tips of grass stalks and hunt in the space above the grass layer rather than within it'. He describes the simple, unspecialised ovipositor (Figs 58D–F) and argues that they might '… drop their eggs at random from perches, thus avoiding visits to the ground'.

Habitat shrubs and bushes: species '… perch at the tips of twigs (i.e. not leaves) on the outer "surface" of bushes'; they '… tend to hawk repeatedly from the same perch (i.e. they dart at prey and return with or without it to the same perch)'.

Habitat trees: species '… perch at the tips of dead twigs'.

The general observation that all species of Leptogastrinae live within grasslands or in bushes nearby can be exemplified by evaluating the many ecological data that are available from the specimen's label. A short summary with examples of such ecological data summarised from the examined specimens of *Euscelidia* is given here: *Eragrostis* (Poaceae) patch; *Hyperthelia* (Poaceae) grass in *Terminalia* (Combretaceae) veld; *Themeda* (Poaceae) grassveld; *Themeda triandra* veld; *Acacia* (Mimosaceae) grassland; dense grass in *Acacia* veld; acacias, long grass near cattle pens; *Acacia* thornveld and dry river course; dry wash in *Acacia*-covered plain; *Acacia* bushveld; *Acacia xanthophloea* forest; acacias and low shrubs; riverine *Brachystegia* (Caesalpiniaceae) woodland; savannah woodland; grass and hillside Macchia; open grassland; swept on open grassland; grassland and forest margins; grassland/stream edge; grass and shrubs near river; grassland and road verges; arid grassland and bush; open grassveld area; rocky grassland; grassy hillside with rocks and bushes; rocky area bushveld long grass; rocky side of koppie, grass, trees and bush; trees and grass in poorly drained area; uplands grassveld; open hillside grass; grass under trees; bushveld with long open areas of grass; grass under or near big trees near river; mountain base grass-bushveld; abundant amongst grasses surrounding lake; grass in thornveld; forest and open woodland areas; indigenous bush area; bushveld vegetation; riverine bush, montane slopes; coastal bush and forest.

Additional ecological data that were found on labels, but do not explicitly state an affinity to grasslands are for example (note: grass will certainly be present in all of these habitats, too): swept along roads in dry forest; swept in Miomboveld; Mopane woodland on rocky hillside; coast lowland forest; margins of indigenous forest; edge of montane forest; road and forest margin; swept among vegetation close to sea shore; dune forest.

Many of the specimens examined were caught in Malaise traps.

The following prey records are available for species of *Euscelidia*.

E. brunnea: Insecta: Hemiptera: Fulgoromorpha.

♀♀ of *E. datis* species-group: Insecta: Hemiptera: Heteroptera; Diptera: Tabanidae (several species).

E. procula: Araneae; Insecta: Caelifera: Acrididae; 'Psocoptera'; Hemiptera: Fulgoromorpha; Lepidoptera; Hymenoptera: Formicidae; Coleoptera: Scarabaeidae; Diptera: Tipulidae, Chironomidae, Bombyliidae, Asilidae: *Damalis* Fabricius, 1805 sp., Tephritidae, Sepsidae, Tachinidae, Muscidae, Calliphoridae.

Seasonal incidence

The seasonality of all species examined is illustrated in Table 2. A distinction between 4 geographic areas was analysed to reflect the different seasons in the northern and southern hemisphere – north of 15°N; north and south of the equator to 15°N and S respectively (tropic latitudes); south of 15°S. *E. procula*, the most widespread Afrotropical species, appears to fly for much of the year. *E. marion*, mostly distributed on the island of Sri Lanka, occurs for much of the year and has only not been collected in August and December. *E. bechuana*, *longibifida*, *natalensis*, and *notialis*, restricted in their distribution to southern Africa, appear to fly during the southern hemisphere summer time, only. *E. pallasii*, distributed in the southern Palaearctic Region, flies during the northern hemisphere summer. Many other species have been collected only on few occasions and their true seasonal incidence cannot be reflected in the table.

TABLE 2.

Seasonal incidence of species of *Euscelidia*. Not included are *E. rapax* and *E. nitida* because no collection dates are available. Species are arranged alphabetically within the zoogeographical Region they occur in.

Species	**Geographic Region**	**Month**											
Afrotropical		**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
acuminata	S of 15° S												
adusta	equator to 15° N												
anthrax	S of 15° S												
artaphernes	equator to 15° N												
	equator to 15° S												
	S of 15° S												
atrata	equator to 15° N												
bechuana	S of 15° S												
bequaerti	equator to 15° N												
	equator to 15° S												
bicolor	equator to 15° S												
	S of 15° S												
bishariensis	N of 15° N												
brunnea	S of 15° S												
cacula	equator to 15° S												
cana	S of 15° S												
capensis	S of 15° S												
castanea	equator to 15° N												
	equator to 15° S												
crena	equator to 15° S												
datis	equator to 15° N												
	equator to 15° S												
discors	equator to 15° N												
dorata	equator to 15° N												
	equator to 15° S												
	S of 15° S												
erichthenii	equator to 15° N												
fastigium	S of 15° S												
festiva	equator to 15° N												
	equator to 15° S												
fistula	S of 15° S												
francoisi	equator to 15° S												
	S of 15° S												
hesperia	equator to 15° N												
hyalina	equator to 15° N												
insolita	equator to 15° S												
kasungu	equator to 15° S												
lata	equator to 15° N												
longibifida	S of 15° S												
lucida	equator to 15° N												
lucioides	equator to 15° S												
milva	equator to 15° N												
moyoensis	equator to 15° N												
	equator to 15° S												
mucronata	equator to 15° S												
natalensis	S of 15° S												

TABLE 2 (continued).

Species	**Geographic Region**	**Month**											
Afrotropical		**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
nenemusha	equator to 15° S												
notialis	S of 15° S												
obtusa	equator to 15° S												
	S of 15° S												
obudu	equator to 15° N												
ochricornis	equator to 15° S												
peteraxi	S of 15° S												
picta	equator to 15° S												
pipinna	S of 15° S												
procula	equator to 15° N												
	equator to 15° S												
	S of 15° S												
pulchra	equator to 15° N												
	equator to 15° S												
	S of 15° S												
schoutedeni	equator to 15° N												
senegalensis	equator to 15° N												
trifoliata	equator to 15° S												
tsavo	equator to 15° S												
	S of 15° S												
valida	equator to 15° N												
	equator to 15° S												
	S of 15° S												
vallis	S of 15° S												
venusta	equator to 15° S												
	S of 15° S												
zumpti	S of 15° S												
Oriental													
abbreviata	equator to 15° N												
cobice	equator to 15° N												
flava	equator to 15° N												
glabra	equator to 15° N												
lepida	N of 15° N												
livida	N of 15° N												
marion	equator to 15° N												
popa	N of 15° N												
prolata	equator to 15° N												
rapacoides	N of 15° N												
splendida	equator to 15° N												
Palaearctic													
gutianensis	N of 15° N												
pallasii	N of 15° N												

TABLE 3.

Comparative character matrix. Not included are *Euscelidia discors*, *E. gutianensis*, and *E. zumpti* because no specimens have been examined. Species are arranged alphabetically within the zoogeographical Region they occur in.

Species	**Feature**									
Afrotropical	I	II	III	IV	V	VI	VII	VIII	IX	X
acuminata	1	1	1	0	0	0	0	1	1	0
adusta	0	0 + 1	1	0	0	0	1	1	1	1
anthrax	0	2	1	2	1	1	2	0	0	1
artaphernes	1	2	1	1	1	1	0	0	0	2
atrata	0	2	1	0	1	1	0	1	1	1
bechuana	1	1	1	0	0	0	0	1	1	0
bequaerti	0	2	1	0	0	0	3	1	1	0
bicolor	1	1	1	0	0	0	0	1	1	0
bishariensis	0	1	0	0	0	0	1	1	1	1
brunnea	1	1	0	0	0	0	0	1	1	1
cacula	1	2	1	2	1	0	0	1	1	1
cana	1	1	0	0	0	0	0	1	1	1
capensis	1	1	1	0	1	0	0	1	1	1
castanea	0	2	1	2	0	0	5	?	?	?
crena	0	1	0	2	0	0	0	1	1	1
datis	1	2	1	1	1	1	0	0	0	2
dorata	0	0	0	2	1	0	0	1	1	2
erichthenii	1	1	1	0	0	0	0	1	1	0
fastigium	0	0	0	2	1	0	0	?	?	?
festiva	0	2	1	0	1	0	3	1	1	0
fistula	1	2	1	0	1	0	0	1	1	1
francoisi	1	2	1	0	0	0	0	1	1	1
hesperia	1	2	1	1	0	0	1	1	1	1
hyalina	0	2	1	0	0	0	4	1	1	0
insolita	1	2	1	2	1	0	0	1	1	1
kasungu	1	1	1	1	0 + 1	0	0	1	1	0
lata	1	2	1	1	1	1	0	0	0	2
longibifida	1	1	1	0	1	0	0	1	1	0
lucida	0	1	1	1 + 2	0	0	4	1	1	0
lucioides	0	1	1	1	0	0	2	1	1	0
milva	1	2	1	1	1	1	0	0	0	2
moyoensis	1	2	1	1	1	1	0	1	0	1
mucronata	1	1	1	0	0 + 1	0	0	1	1	0
natalensis	1	1	1	0	1	0	0	1	1	1
nenemusha	0	2	0	2	0	0	1	?	?	?
notialis	1	0 + 1	1	0	1	0	0	1	1	1
obtusa	1	1	1	0	0	0	0	1	1	0
obudu	0	2	1	0	0	0	4	1	1	0
ochricornis	1	1	1	1	0	0	0	1	1	0
peteraxi	1	1	1	0	0	0	0	1	1	0
picta	0	1	1	1	0	0	0	1	1	0
pipinna	1	1	1	0	0	0	0	1	1	0
procula	1	2	1	1	0	0	1	1	0	1
pulchra	1	2	1	2	0	0	1	1	1	1
rapax	1	2	1	1	1	1	0	0	0	2
schoutedeni	0	2	1	1	0	0	5	?	?	?
senegalensis	1	2	1	2	1	0	0	1	0	1

TABLE 3 (continued).

Species	**Feature**									
Afrotropical	**I**	**II**	**III**	**IV**	**V**	**VI**	**VII**	**VIII**	**IX**	**X**
trifoliata	0	2	1	1	0	0	1	1	1	?
tsavo	1	1	1	0	0	0	0	1	1	0
valida	1	2	1	2	1	0	0	1	1	1
vallis	1	1	1	0	1	0	0	1	1	1
venusta	1	1	1	0	0	0	0	1	1	0
Oriental										
abbreviata	0	1	1	2	0	0	0	1	0	1
cobice	1	1	1	2	1	0	1	1	1	1
flava	1	1	1	2	1	0	0	1	0	1
glabra	1	2	1	2	0	0	1	1	1	0
lepida	0	1	1	2	0	0	0	1	0	1
livida	1	1	1	1	0	0	0	1	1	1
marion	1	2	1	0	1	0	0	1	1	0
popa	1	1	1	2	1	0	0	?	?	?
prolata	1	1	1	2	0	0	0	1	1	0
rapacoides	1	1	1	0	1	0	0	?	?	?
splendida	1	2	1	2	1	0	0	1	1	1
Palaearctic										
nitida	0	1	0	2	0	0	1	1	1	1
pallasii	1	1	1	2	1	0	1	1	1	1

Comparative character matrix (Table 3)

This matrix is provided to assist in identifying species with the help of diagnostic features and supplements the identification key. Not included are *discors*, *gutianensis*, and *zumpti* because no specimens have been examined.

List of characters:

I. Number of setae comprising mystax - (0) few, usually less than 12; (1) many, usually more than 20.

II. Development of pruinosity on sct - (0) entirely covered with pruinosity; (1) predominantly pruinose, but longitudinal median stripes and/or lateral spots apruinose; (2) predominantly apruinose, pruinosity restricted to anterior, lateral, and posterior margins.

III. Development of setae on posterior sct - (0) only few, short setae present; (1) many, long setae present.

IV. Length of emp - (0) minute, indistinct; (1) very short, distinct; (2) long, from a fifth to nearly the length of a clw.

V. Development of microtrichia in cell d - (0) no or only few microtrichia; (1) densely covered with microtrichia.

VI. Transparency of wing - (0) hyaline; (1) opaque (brown coloured).

VII. Development of dorsal pruinosity on abdominal tergites - (0) all T entirely covered with pruinosity; (1) T2 with apruinose spot anteriorly; (2) T2–3 with apruinose spots anteriorly; (3) T2–4 with apruinose spots anteriorly; (4) T2–5 with apruinose spots anteriorly; (5) T2–7 with apruinose spots anteriorly.

VIII. Shape of ventral margin of sur (lateral view) - (0) straight, no lobe; (1) distinct lobe of variable shape present.

IX. Shape of dorsal tip of sur (lateral view) - (0) dorsal tip broad, blunt; (1) dorsal tip pointed.

X. Length of d aed shea - (0) short; (1) medium; (2) long (extending hypopygium).

List of valid species:
Afrotropical Region (55 species) - *acuminata*, *adusta*, *anthrax*, *artaphernes*, *atrata*, *bechuana*, *bequaerti*, *bicolor*, *bishariensis**, *brunnea*, *cacula*, *cana*, *capensis*, *castanea*, *crena*, *datis*, *discors*, *dorata*, *erichthenii*, *fastigium*, *festiva*, *fistula*, *francoisi*, *hesperia*, *hyalina*, *insolita*, *kasungu*, *lata*, *longibifida*, *lucida*, *lucioides*, *milva*, *moyoensis*, *mucronata*, *natalensis*, *nenemusha*, *nitida**, *notialis*, *obtusa*, *obudu*, *ochricornis*, *peteraxi*, *picta*, *pipinna*, *procula*, *pulchra*, *rapax*, *schoutedeni*, *senegalensis*, *trifoliata*, *tsavo*, *valida*, *vallis*, *venusta*, *zumpti*.

Oriental Region (11 species) - *abbreviata*, *cobice*, *flava*, *glabra*, *lepida*, *livida*, *marion*, *popa*, *prolata*, *rapacoides*, *splendida*.

Palaearctic Region (4 species) - *bishariensis**, *gutianensis*, *nitida**, *pallasii*.
* *E. bishariensis* and *nitida* are probably distributed in both the Afrotropical and Palaearctic regions.

NOTE ADDED AFTER COMPLETION OF PAGE-LAYOUT

Five specimens collected in Sri Lanka and deposited in the USNM collection were examined while this revision was already in press. They represent two undescribed species of which only the locality data and date of collection will be provided: Species I – 1_ Kala-Oya, 1.viii.1975; Species II – 1♀ 1♂ Ma Villu, Cashew Corp., 17-21.ii.1979; 1♀ Angunakolapelessa, 24-26.ix.1977; 1♀ Wilpatta National Park, 5-8.x.1977.

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